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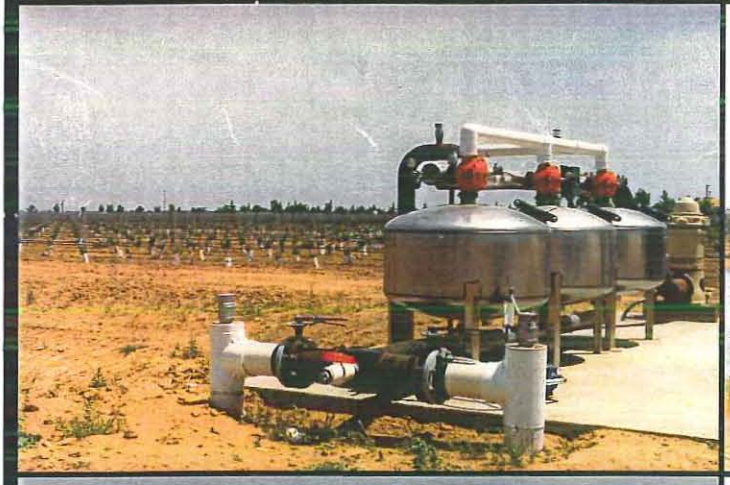
AB3030 Groundwater Management Plan

May 1999

Madera Irrigation District



BOYLE ENGINEERING CORPORATION

AB3030 Groundwater Management Plan

Madera Irrigation District

Boyle Engineering Corporation

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May 1999

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Section 1
Introduction

1.1 Legal Authority

In some portions of California, groundwater represents an easily accessible, inexpensive alternative to surface water. Because the groundwater source is easily accessible, it has been heavily relied upon to meet supplemental water supply needs. Excessive use of groundwater has led to land subsidence, groundwater quality deterioration, and overdraft in some areas. Overdraft is the condition whereby the groundwater is extracted in quantities exceeding the long-term recharge replenishment capability of the groundwater basin.

In 1992, the California Assembly took action to address the lack of coordinated groundwater resource management in the State Assembly Bill 3030 (Water Code Sections 10750-10755) which provides the legislative authority for local water agencies to manage groundwater resources specifically. AB3030 enables local water agencies, such as the Madera Irrigation District (District), to develop and implement a groundwater management plan (GMP). The purpose of any GMP is to establish the role of the local agency in managing the local groundwater resources so as to maximize the water supply and to protect the quality of the supply.

The law contains 12 components that may be included in the GMP. Each component may play some role in evaluating or operating a groundwater basin so that groundwater can be managed to maximize the total water supply while protecting groundwater quality. Following the development of any GMP, the District must plan for a period of at least 35 days so as to allow for protests against the implementation of the plan to be filed. If the majority does not protest within the 35-day review period, the GMP can be adopted and implemented.

1.2 Past Groundwater Management Practices

The District works closely with the California Department of Water Resources and the Bureau of Reclamation to monitor the groundwater level and quality within the District. Twice a year (once in the spring, once in the fall), the District measures the depth to the static water level in several wells throughout the District. These measurements indicate that the static water table averages a decline of approximately 1.25 feet per year. However, the depth to the static water table varies throughout the District. Those areas in the District adjacent to the San Joaquin River have static water levels of 40 to 50 feet, while the deeper static water levels are as much as 200 feet. On the average, the static water level is 82 feet below the ground surface. In an effort to replenish the groundwater supply, the District operates ponds and canals that contribute to the recharge of the groundwater. Water is routed through natural channels such as the Fresno River, the channel below the Fanchi weir, and Cottonwood Creek,

when available, even when there are no riparian diversions. A list of the designated groundwater recharge facilities is provided below:

Name	Location[1] Township/Range/Section	Area (acres)
Lake Madera	T10S/R18E/S34	300
Airport Pit	T11S/R17E/S10	12
Burgess Pond	T11S/R18E/S32	5
Pistoresi Pond	T11S/R17E/S28	10
Allende Pond	T12S/R18E/S15	5
Russell Pond	T12S/R18E/S08	19
Dirt/Beeman Pond	T12S/R18E/S17	9
Hospital Pond	T11S/R18E/S30	3

[1]See Figure 1-1 for the locations of these recharge basins.

Water used for groundwater recharge is taken from the Fresno and San Joaquin Rivers. In addition to the recharge basins mentioned above, groundwater recharge is accomplished through the use of natural channels, unlined canals, and agricultural lands.

1.3 Goals of the Groundwater Management Plan

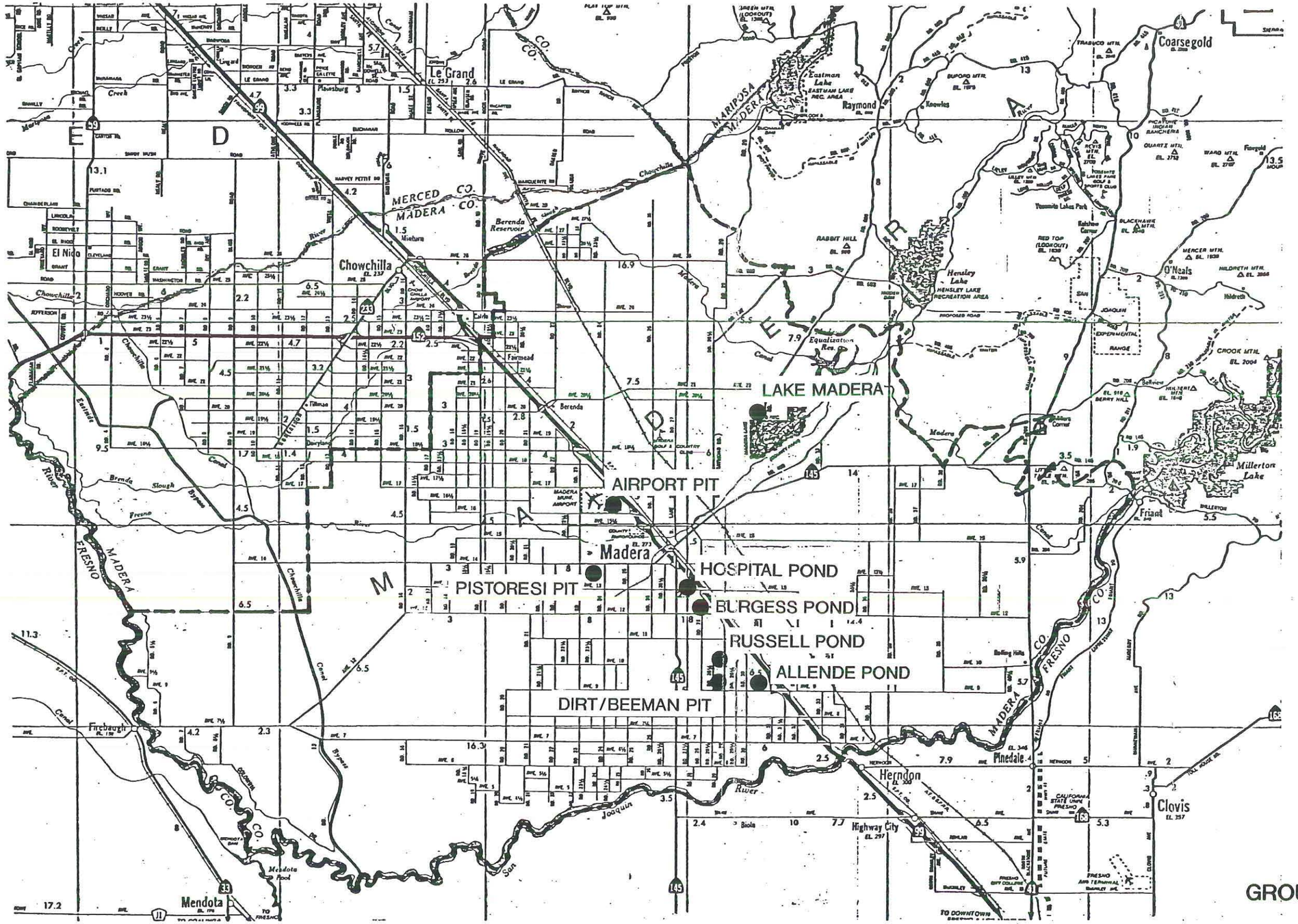
The District plans to develop a groundwater management program that is consistent with the following mission statement:

> *The District's primary mission is to obtain and manage affordable surface and groundwater supplies in a manner which will ensure the long-term viability of irrigated agriculture in the District.*

The District recognizes that groundwater is a major factor in being able to fulfill its mission statement. As a result, the District is preparing a groundwater management plan, the primary goal of which is to define the role of the District in managing the local groundwater resources so as to maximize the total water supply and protect the quality of the supply. To accomplish this goal, the District intends to evaluate and implement programs that will preserve the long-term viability of the groundwater resources within and adjacent to the District.

Other primary goals of this GMP are listed below:

- Ensure the long-term availability of high-quality groundwater.
- Maintain local control of groundwater resources within the District.
- Minimize the cost of groundwater use.



GROUNDWATER RECHARGE FACILITIES

MADERA IRRIGATION DISTRICT

GROUNDWATER MANAGEMENT PLAN

M5010101

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FIGURE 1-1

- Prohibit the net export of groundwater from the District and use of groundwater to replace surface water removed from the District as a result of a transfer.
- Minimize the impacts of groundwater pumping, including subsidence, overdraft, and soil productivity.
- Prevent unnecessary restrictions on the private use of the District's groundwater resources.
- Ensure coordination between the District, local, and regional groundwater management activities.
- Ensure efficient use of the District's groundwater resources and minimize deep percolation in areas where it may contribute to the shallow groundwater problem through the use of an effective water conservation and management program.
- Ensure that the District's water users understand the steps they can take to protect and enhance their groundwater supply.
- Encourage water conservation by the farmers, which includes providing information on efficient irrigation practices.
- Support the programs for the agricultural reuse of reclaimed water.
- Coordinate with other local irrigation districts and the city and county of Madera to preserve local water rights.

Section 2
Description of Groundwater Management Plan Area

2.1 Description of District

The Madera Irrigation District encompasses an area of 128, 924 acres on the San Joaquin valley floor in Madera County. The District varies in width from five to thirteen miles. It is bounded to the south by the San Joaquin River with the northern boundary at approximately 10 miles north of the City of Madera. The Eastern boundary varies from Highway 99 to 1-1/2 miles east of Highway 99. In addition, there are several remote island areas. Figure 2-1 shows the general location of the District. Within the District boundaries there is an extensive open flow canal system extending approximately 315 miles. In addition, there are approximately 115 miles of pipelines that are used to convey the water throughout the District.

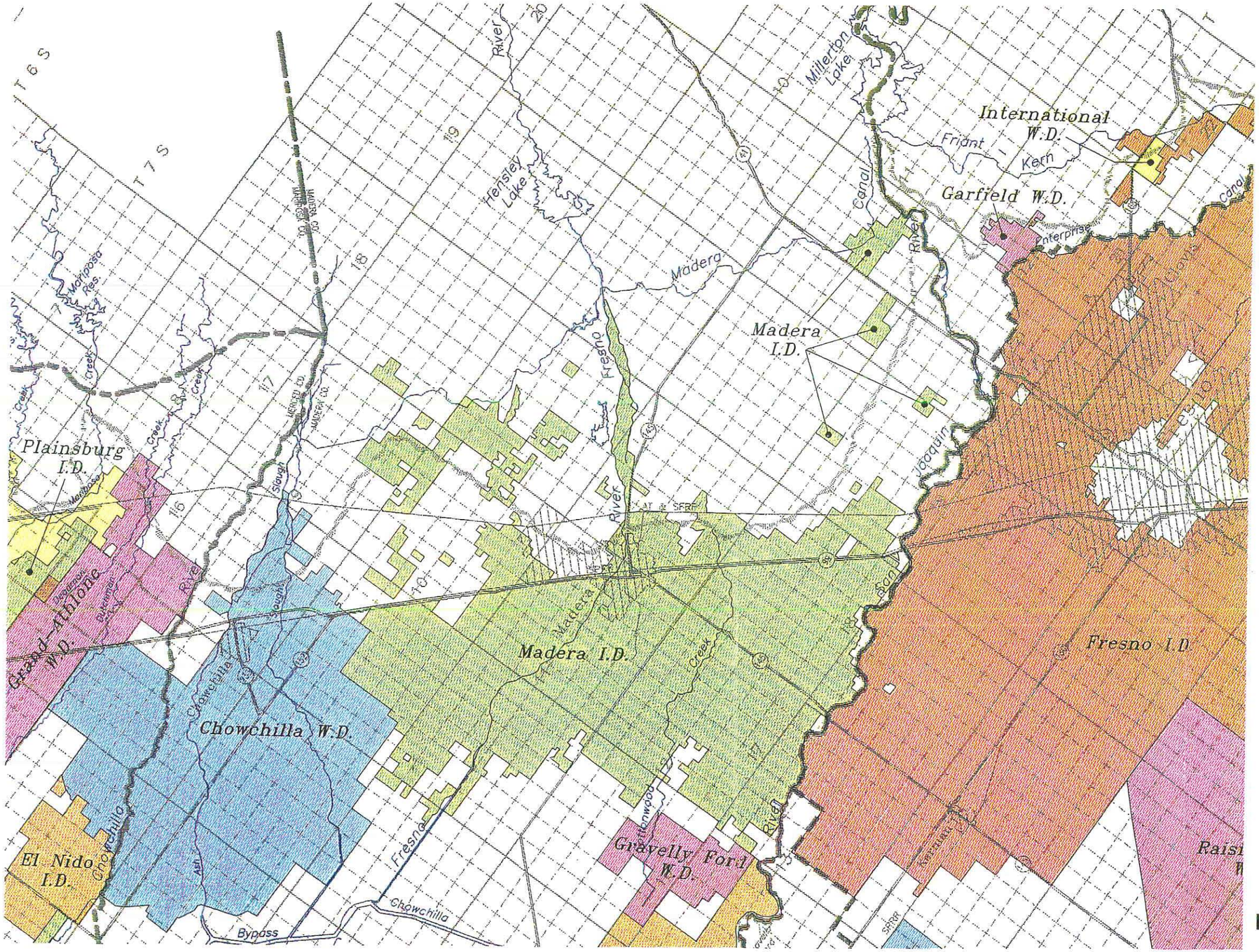
2.2 History

Madera Irrigation District was formed in 1920 with approximately 350,000 acres encompassing the District. The formation was the effort of a 40-member committee organized to bring water to the Madera area. The District purchased a site for Friant Dam and filed for accompanying water rights. These actions were followed by several years of litigation with Miller and Lux and of negotiations with the State Water Authority. These efforts failed leading the District to contract with the United States Bureau of Reclamation. This contract granted the District a guaranteed water supply of a maximum of 270,000-acre feet per year, for an area of 172,000 acres.

Several times since the formation of the District, the area boundary has fluctuated. In 1950, approximately 46,000 acres were excluded from the District to permit the formation of the neighboring Chowchilla Water District reducing the gross area to 112,500 acres, of which 94,500 acres is irrigable area. In 1975, the District added 15,000 acres as required by a contract with the Bureau that provided 24,800-acre feet on average from Hidden Dam. In 1983, the District joined the Mid Valley Water Authority in an effort to obtain additional water supplies for the District.

2.3 Location/Facilities

The District's water and distribution system is a combination of open flow primary and secondary laterals, enclosed conduit, and natural streams. There are approximately 315 miles of open flow canals and laterals, 115 miles of pipeline, and 102 miles of natural streams used for District conveyance and distributions. The open flow canals are comprised of approximately 90 miles of unlined canals and



SCALE 1" = ±4.2 MILES

DISTRICT BOUNDARY MAP

MADERA IRRIGATION DISTRICT

GROUNDWATER MANAGEMENT PLAN

M5010101

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FIGURE 2-1

225 miles of the Bureau of Reclamation built "lined" canals. The pipelines range in size from 12 inches to 84 inches with about half of the pipelines being cast in place. The open flow laterals range in capacity from 5 cfs to 340 cfs. Many of the non-piped laterals have been in use for over 100 years.

With the exception of a few small pump stations, the distribution system is a gravity system. However, there are approximately 1,600 turnouts, and about one-third are equipped with grower lift pumps in order to obtain adequate on-farm flow. There are no reservoirs or regulating reservoirs located within the District.

The District receives water via the Madera Canal from Friant Dam through natural streams and open flow primary laterals. Fresno River water is available from both controlled release and uncontrolled flows from Hidden Dam. Water from the Madera Canal may also be released into the Fresno River. Water is diverted from the Fresno River at the District's Fanchi Diversion Weir on the east side of the District. This provides service to approximately 45,000 acres. The Fresno River is also the conveyance to direct pump dwellers, the Island Tract pumping plant service area, and riparian users.

Franchi

2.4 Size

The District encompasses an area of 128,294 acres on the San Joaquin Valley floor in Madera County. The District generally varies from 5 to 13 miles in width bounded on the south by the San Joaquin River, with the northern boundary approximately 10 miles north to the city of Madera. The eastern boundary varies from Highway 99 to 1.5 miles east of the highway. There are several remote island areas that are also included.

2.5 Terrain and Soils

Lands in the District are gently sloping from northeast to southwest, with a fall of approximately 5 feet per mile. The District can be divided into two major segments in terms of terrain and soils:

- Recent alluvial fans and floodplains
- Older alluvial fans and terraces

The soils of the recent alluvial fans and floodplains cover the area from the Fresno River south to the San Joaquin River and primarily consist of the Traver-Chino and the Hanford-Tujunga types of soil. These soils are categorized as Class 1 and Class 2 soils and exhibits high surface and subsurface permeability.

The soils of the older fans and terraces cover the 10-mile-wide area from the Fresno River north to the District's northern boundary. The predominant soils classification for this area is of the San Joaquin-Madera association. They are generally classified as Class 3, 4, and 5, and generally exhibit low permeability at both the surface and subsurface levels.

2.6 Climate

Annual precipitation in the District averages about 10.3 inches, the majority of which falls during the months of November through April. Summer maximum temperatures frequently exceed 100°F, and winter temperatures vary from the high 30s to low 40s at night to the low 50s during the day. Normally, the frost period is between November and mid-March.

Although the climate in the District is generally dry with mild winters and hot summers, humidity can be as high as 90 to 100 percent during the early morning in December and January. Inversion layers accompanied by "Tule fog" are not uncommon during the winter months.

2.7 Water Supply

Since the majority of the precipitation falls in the winter, most landscaping, crops, and agriculture are dependent upon irrigation during the growing season. The District's main source of water is through water diversions from Friant Dam. Other sources of water for the District include Hidden Dam as well as from water rights on the Fresno River, including Big Creek Diversion from the Merced River watershed and the Soquel Diversion from the San Joaquin watershed.

In 1951, the District negotiated a contract with the Bureau of Reclamation (Bureau) for the water from Friant Dam. The contract provided for 85,000 AF of Class I water and 186,000 AF of Class II water. Class I is a relatively firm supply, whereas Class II is on an as-available basis and its quantity varies from year to year. All water supplied under this contract with the Bureau is through the Friant-Kern and Madera canals, which redistribute the waters of the San Joaquin River downstream of the Friant Dam. On the average, 100 percent of the Class I and 48 percent of the Class II water is provided to the District annually.

Water supplied to the District under the Hidden Dam contract with the Bureau is for the conservation yield of the project. However, the project has stringent flood control criteria that precludes any realistic carryover storage or early season storage.

The Big Creek and Soquel Diversions provide an average annual supply of 10,000 AF and 9,700 AF, respectively. The Fresno River adjudicated and appropriative average annual supply is approximately 20,000 AF and is inclusive of the Big Creek and Soquel diversions.

The following table summarizes the amount of water the District has been supplied from the various sources over the 10-year period of 1988 to 1997.

Year	Water Supplied to District[1] (AF)
1988	92,162
1989	110,801
1990	79,573
1991	122,090
1992	98,962
1993	330,248
1994	123,084
1995	327,376
1996	307,266
1997	295,302

[1]The water supplied includes transfers in and out of the supply and spill lost while in the San Joaquin River.

The total amount of water supplied to the District on an average annual basis is 188,686 AF from the various sources based on this 10-year period. Despite the amount of water available per year, the District is only able to provide a supplemental water supply to its users, all of which are agricultural.

2.8 Water Demand

The total water demand for the District varies from year to year. Climate is the major cause of this variation. In very wet years, the water demand on the District is significantly less than during drought years. The District reports that the water deliveries from 1988 through 1997 are as shown in the table below.

Year	Water Delivered to Growers (AF)
1988	54,592
1989	62,096
1990	46,828
1991	79,700
1992	62,896
1993	154,290
1994	72,141
1995	129,298
1996	138,909
1997	154,821

The average total grower deliveries for the 10-year period of 1988 to 1997 is 95,557 AFY. This water delivered to the growers originates at one of the District's sources for surface water supply. Additional water required for the farming of crops within the District is extracted from the groundwater table.

The water provided to growers is used for a variety of different crops. Cropping patterns within the District have changed drastically with time. Table 2-1 provides a list of crops grown within the District as well as the number of acres of that crop per year. The table ranges in time from 1962 to the latest available data in 1997. This data is supplied annually to the District in the annual crop survey. In addition, Table 2-1 provides the 5-year average number of acres for each crop for the 5-year period of 1993 to 1997. The average number of acres of irrigated farmland for this period is 168,779. However, the number of acres designated for agriculture has continuously increased since 1962 with an average yearly increase of approximately 2 percent. The continuous increase in the amount of farmland can be attributed to the growth of the District.

Table 2-2 provides a list of the different crops grown within the District as well as the average amount of water applied to the crop per year and the average total amount of water applied per year. The average number of crops for the period of 1993 to 1997 was used in determining an average crop water demand per year. From 1993 to 1997, the number of acres per crop has been relatively constant as compared to earlier years as shown in Table 2-1. The total annual water applied to the various crops throughout the District is 318,740 AF as shown in Table 2-2. There are a variety of sources used to supply this amount of water to the crops. The various sources include the following:

- Surface water delivered from the District
- Groundwater extracted from the groundwater table
- Precipitation

Another factor that affects the water demand for the District is urban growth. The majority of the city of Madera is included within the boundaries of the District and has continuously urbanized with time. Table 2-3 shows the number of acres of urban/industrial land within the District. As shown in the table, it is apparent that the acres of urban/industrial land has increased significantly since 1962. The District has changed its boundaries several times since the original boundaries. Therefore, the amount of land designated as urban/industrial has continuously changed. As urbanization continues in the areas surrounding the city of Madera, land that at one time was primarily agricultural has been converted to developed land. This reduces the amount of water used by crops each year as well as the recharge of the groundwater basin.

Figure 2-2 shows the increase in urban/industrial land for the period 1992 to 1997. For this time period, there has been a continuous increase in the amount of urban land. As shown on Figure 2-2, the projected amount of urban land in the year 2000 is approximately 14,200 acres; and in 2010, the amount of urban land is projected to be as much as 17,500 acres. This is a projected increase of approximately 3 percent per year for the next 12 years. The continuous urban growth will impact the condition of the groundwater basin.

Table 2-1
Madera Irrigation District
Groundwater Management Plan
Summary of Crop Demand

Year	Grains	Rice	Cotton	Sugar Beets	Corn	Other Field	Alfalfa	Pasture	Tomatoes	Almonds/ Pistachios	Other/ Truck	Grapes	Citrus/ Olives	Deciduous	Total Acres
	Acres														
1952	6460	0	38616	0	83	241	14217	14798	0	116	1695	18501	0	2069	74358
1962	4702	0	23731	260	2494	980	13839	14535	0	1267	1537	28381	28	3879	99254
1972	3210	0	11994	40	3083	2217	11218	12766	0	6118	1686	40009	619	3769	129934
1973	3063	0	11871	0	4371	1568	8521	13469	0	6501	103	42773	629	3652	134254
1974	4511	0	13954	163	3070	2934	8057	12080	0	7520	54	43953	587	3779	135946
1975	11149	0	8604	237	3478	278	8357	11224	0	8642	209	44209	582	3759	137250
1976	10696	0	8638	321	2867	218	8506	11148	0	8699	83	44556	583	4611	139360
1977	5129	0	13530	54	1951	507	7987	10915	0	8927	2	45348	709	4842	141486
1978	5908	0	12087	0	4488	1846	6079	11298	0	9308	62	46656	554	4929	145614
1979	6262	0	13375	0	2143	1119	4169	9613	0	10504	70	48379	551	4802	147838
1980	7206	0	10947	0	3826	921	3744	8090	0	11252	50	50509	565	5034	151000
1981	6101	0	8953	0	3945	877	3137	7252	0	12211	65	52338	568	5012	154892
1982	8907	0	7244	0	1942	1600	2568	5861	0	13304	433	53933	564	5380	158950
1987	3802	0	6531	0	2704	972	1638	4434	0	13758	907	53819	923	5661	159004
1992	3698	0	4863	0	1795	114	1819	3087	77	15673	893	53182	1285	6651	161696
1993	2485	0	3939	0	3172	0	1461	3481	172	15876	811	53817	1340	6634	164262
1994	1525	0	4223	0	1664	0	1113	3647	3	17093	1163	52897	1447	6748	165996
1995	3431	0	4432	0	1807	0	1056	3716	10	16508	1318	54180	675	7339	167492
1996	3320	0	3122	0	1966	398	956	3981	10	17487	1408	54755	643	7500	171568
1997	941	0	2072	0	3632	207	1085	4451	7	18328	1285	54765	905	7548	174578
5-year Average, Acres	2340	0	3558	0	2448	121	1134	3855	40	17058	1197	54083	1002	7154	168779

Table 2-2
Madera Irrigation District
Groundwater Management Plan
Summary of Five-Year Average Annual Crop Water Requirements

Crops	Five-Year Average Annual Area[1] (acres)	Unit Water Applied[2] (AF/ac)	Annual Total Water Applied (AF)
Grains	2,340	1.3	3,042
Rice	0	--	0
Cotton	3,558	3.3	17,741
Sugar Beets	0	3.2	0
Corn	2,448	2.8	6,855
Other Field	1,211	2.9	351
Alfalfa	1,134	4.5	5,103
Pasture	3,855	4.5	17,348
Tomatoes	40	3.0	120
Other Truck	1,197	2.2	2,634
Almonds/Pistachios	17,058	3.1	52,880
Grapes	54,083	3.6	194,699
Citrus/Olives	1,002	2.5	2,505
Deciduous	7,154	3.0	21,462
Totals			318,740

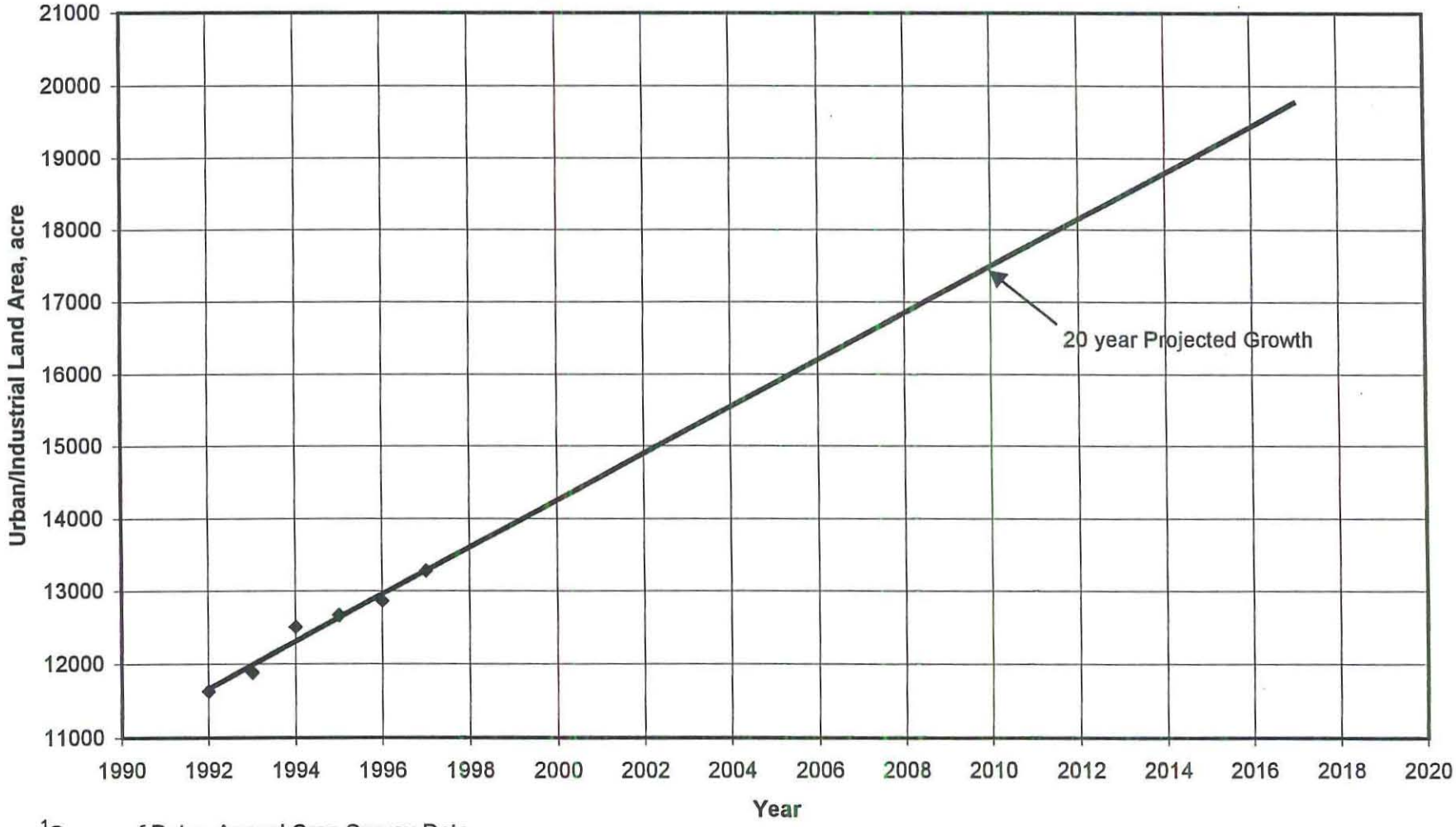
[1]Summary of Crop Acres provided by California Department of Water Resources.
[2]Unit applied water values provided by California Department of Water Resources.

Table 2-3
Madera Irrigation District
Groundwater Management Plan
Urban Growth Within the District

Year	Urban/Industrial Land Area (acres)
1962	9824
1972	11008
1973	11278
1974	11300
1975	11417
1976	11449
1977	11632
1978	11836
1979	12020
1980	11785
1981	11346
1982	12194
1987	10727
1992	11631
1993	11881
1994	12502
1995	12666
1996	12862
1997	13279

[1]Farmsteads were excluded from urban/industrial land area after 1987. Prior to 1987, farmsteads were incorporated into urban land area.

Figure 2-2
Madera Irrigation District
Groundwater Management Plan
Urban/Industrial Land Area Vs. Year[1]



[1]Source of Data: Annual Crop Survey Data

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2.9 Groundwater Quality

Groundwater quality is influenced by various factors such as the quality of watershed runoff, the mineral content of soils, land use practices such as fertilizer and pesticide application, and localized waste disposal practices. The use of groundwater for domestic and agricultural purposes is only feasible if it is of an acceptable quality. As a result, this GMP includes provisions to help maintain the groundwater at an acceptable quality.

Groundwater quality within the Madera groundwater basin is currently not monitored by the District. The only parameter that is monitored is the depth to static water level. However, between 1959 and 1989, the quality of the groundwater was monitored by the United States Bureau of Reclamation. Table 2-4 lists all the constituents that were measured as well as the range and average values for the period of record. In addition, Table 2-4 provides the current EPA standards for drinking water parameters. For the period of record between 1959 and 1989, the groundwater within Madera Irrigation District is of excellent quality as it does not exceed any of the maximum contaminant levels for secondary drinking water standards.

However, in recent years, the groundwater in areas within the District boundaries has experienced problems with DBCP and salt brine contamination. The salt brine plume is located in the vicinity of the Tri-Valley Growers olive plant (Oberti Olives) in the Avenue 13/Road 26 area. Remediation activities to correct this problems are being taken by Tri-Valley under the regulatory direction of the Regional Water Quality Control Board. There is a large plume of DBCP that underlies the District. The apex of the DBCP plume is located at Avenue 12 near Highway 99 and flows southwesterly through the basin. The DBCP plume was initially discovered in 1979 by the County of Madera Public Health officials. In several places, a large concentration of DBCP was found. In 1993, another study was done to determine whether the plume continued to exist and the concentration of DBCP in the groundwater. The results of the 1993 study indicated that the plume continues to move in a southwest direction. However, the concentration of DBCP in the groundwater had significantly decreased.

2.10 Groundwater Monitoring

Madera Irrigation District monitors an average of 229 wells located throughout the District twice a year. The semiannual well measurement programs are conducted in October and February of each year. These dates were selected because they best characterize the maximum depressed and recovery levels associated with the growing season. The measurements are accomplished by sounding each well in a static condition. This information enables the District to monitor groundwater trends and estimate District-wide pumped groundwater quantities. It also allows the District to calculate seasonal application efficiency more accurately. Fifteen of the monitored wells were selected to be representative of the groundwater levels within the District. Table 2-5 provides the static water level for the 10-year period of 1989 to 1998 for the spring season. The water levels for the fall are listed in Table 2-6 for the same 10-year period. The approximate location of the measured wells can be found on Figure 2-3.

Table 2-4
Madera Irrigation District
Groundwater Management Plan
Summary of Groundwater Quality[1]

Constituent	Unit	Range	Average	EPA Standard Drinking Water[2]
Specific Conductance	µmhos	126-1,370	569	900
Total Dissolved Solids	mg/L	79-989	361	500
Aluminum	mg/L	<0.010-0.020	<0.010	0.2
Arsenic	mg/L	0.001-0.003	0.00156	1,000
Barium	mg/L	0.052-0.180	0.0888	1.0
Bicarbonate	mg/L	52-490	169	N/A
Boron	µg/L	0-900	80.8	--
Bromide	mg/L	0.05-0.35	0.14	--
Cadmium	mg/L	<0.001—0.001	<0.001	0.005
Calcium	mg/L	10.0-150	42.7	N/A
Chloride	mg/L	8-250	53.2	250
Chromium	mg/L	<0.001-0.008	0.0045	0.5
Cobalt	µg/L	<1-1	<1	--
Copper	mg/L	<0.001-0.003	0.0014	1.0
Fluoride	mg/L	0-0.30	0.10	1.4
Iodide	µg/L	1-11	3.1	--
Iron	mg/L	0-0.023	0.0061	0.3
Lead	µg/L	<1-<5	<5	Lead & Copper Rule
Lithium	µg/L	<4-25	12.4	--
Magnesium	mg/L	2.1-34	12.5	N/A
Manganese	mg/L	<0.001-0.005	0.0013	0.05
Mercury	µg/L	<0.1-<0.1	<0.1	--
Molybdenum	µg/L	<1-4	1.2	--
Nickel	mg/L	<0.001-0.001	<0.001	0.1
Nitrate	mg/L	0-53	19.0	45
Nitrate & Nitrite	mg/L	2.3-12	6.7	--
Phosphorus	mg/L	0.03-0.13	0.08	--
Potassium	mg/L	0-14	4.5	--
Selenium	mg/L	<0.001-0.001	<0.001	0.05
Silver	mg/L	<0.001	<0.001	0.1
Sodium	mg/L	10-110	38.5	N/A
Strontium	µg/L	120-830	362	--
Sulfate	mg/L	0-63	15.0	600
Vanadium	µg/L	1-30	14.3	--
Zinc	mg/L	0.005-0.098	0.0332	5.0

[1]Data as reported in the U.S. Bureau of Reclamation's Irrigation Suitability Land Classification Report, September 1993.

[2]SecondaryWater Quality Standards as required by California Safe Drinking Water Act.

Table 2-5
Madera Irrigation District
Groundwater Management Plan
Summary of Spring Depth to Groundwater of Representative Wells[1]

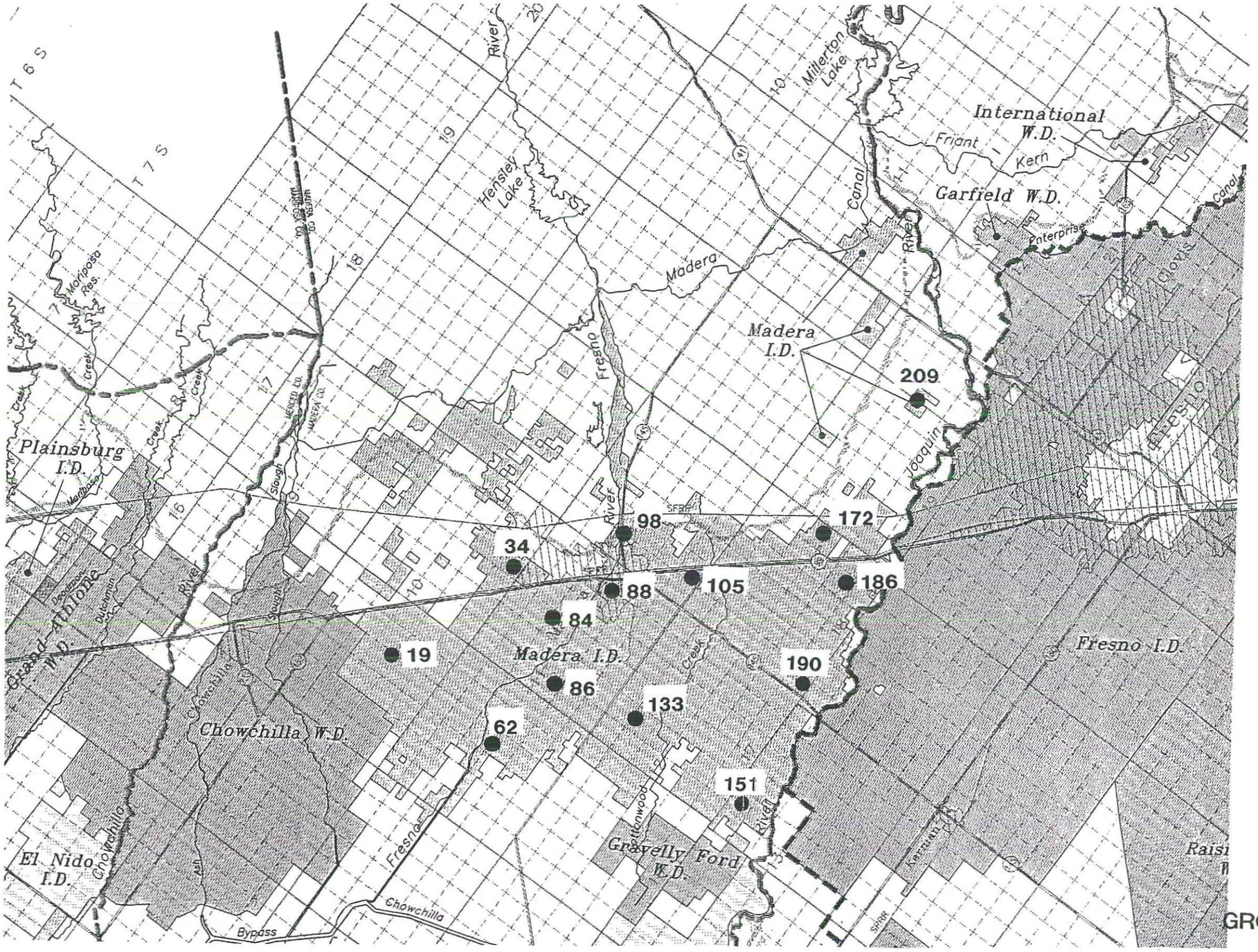
MID Lic. No.	State Well No.	Depth to Groundwater									
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
19	T10S/R16E/S26-B1	144.8	139.0	150.0	153.0	164.2	160.0	168.4	165.1	160.0	156.0
34	T10S/R17E/S34-A1	147.8	141.2	151.1	156.0	170.0	164.6	169.4	176.4	182.1	183.7
37	T10S/R18E/S07-D1	170.0	155.0	161.6	166.6	176.2	178.7	179.2	178.6	182.6	184.0
62	T11S/R16E/S15-L1	98.1	94.6	98.1	102.0	109.6	109.8	110.0	106.3	105.2	102.1
84	T11S/R17E/S16-H1	96.1	101.0	108.2	110.2	115.9	117.2	120.0	121.6	121.7	121.1
86	T11S/R17E/S18-B1	90.2	93.2	104.6	105.2	111.8	110.0	115.0	112.2	110.6	108.6
88	T11S/R17E/S24-D2	98.4	101.1	128.0	124.1	130.7	134.3	134.9	132.9	131.5	130.6
98	T11S/R18E/S18-A1	73.0	--	--	--	84.1	82.4	82.6	80.5	78.3	78.2
105	T11S/R18E/S31-A3	92.2	97.5	102.9	104.7	106.3	110.0	110.9	110.0	112.1	110.0
133	T12S/R17E/S18-H1	80.8	93.0	99.8	101.2	108.7	102.7	105.6	102.0	101.6	98.6
151	T12S/R17E/S32-H1	69.8	75.9	88.0	88.9	90.1	82.4	85.1	83.1	81.0	77.2
172	T12S/R18E/S13-R1	93.8	103.2	108.3	110.6	113.0	103.2	104.6	104.0	103.0	102.3
186	T12S/R18E/S26-R1	76.5	81.7	90.0	92.3	97.9	90.0	94.2	89.1	86.2	81.8
190	T12S/R18E/S31-J1	66.5	72.5	86.3	86.9	93.0	86.2	89.6	86.4	85.1	81.0
209	T12S/R20E/S18-N1	137.7	151.8	160.5	165.0	169.2	161.7	166.4	168.6	166.0	168.4

[1]Measurements as reported in Madera Irrigation District - Semiannual Groundwater Report, Spring 1998.

Table 2-6
Madera Irrigation District
Groundwater Management Plan
Summary of Fall Depth to Groundwater[1]

MID Lic. No.	State Well No.	Depth to Groundwater									
		1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
19	T10S/R16E/S26-B1	141.1	144.8	159.0	166.6	172.2	162.4	178.2	172.8	177.4	180.6
34	T10S/R17E/S34-A2	147.0	147.8	157.3	159.1	176.3	164.0	183.1	184.6	192.8	192.9
37	T10S/R18E/S07-C1	--	170.0	197.3	197.8	171.1	200.0	207.4	190.0	207.6	209.5
62	T11S/R16E/S15-L1	91.5	98.1	108.7	112.7	115.6	112.5	117.2	108.6	114.0	112.6
84	T11S/R17E/S16-H1	114.7	116.2	124.9	126.7	133.3	127.3	135.2	135.1	137.3	148.0
86	T11S/R17E/S18-B1	103.2	109.1	118.1	120.1	122.3	118.4	124.6	120.0	127.3	127.5
88	T11S/R17E/S24-D2	110.0	112.9	138.6	142.2	142.6	143.6	138.2	134.6	138.1	138.7
98	T11S/R18E/S18-A1	--	--	--	--	89.2	84.1	93.7	85.0	85.0	84.6
105	T11S/R18E/S31-A3	100.0	104.2	115.0	117.4	119.7	115.4	120.1	115.5	117.2	113.4
133	T12S/R17E/S10-H1	87.0	91.6	100.5	107.5	110.9	108.2	111.1	107.7	108.0	105.6
151	T12S/R17E/S32-H1	73.1	86.0	91.3	93.9	97.0	93.4	96.1	88.4	87.1	85.4
172	T12S/R18E/S13-R1	99.7	107.7	112.0	114.0	116.6	106.7	110.3	107.4	105.2	105.5
186	T12S/R18E/S26-R1	86.5	91.5	96.2	98.9	103.3	96.1	105.0	97.3	95.2	93.6
190	T12S/R18E/S31-J1	81.9	87.9	92.8	96.7	100.1	92.0	101.7	96.8	96.6	89.4
209	T12S/R20E/S18-N1	142.3	164.2	174.2	178.9	180.8	170.1	182.7	177.5	179.6	183.0

[1]Measurements as reported in Madera Irrigation District - Semiannual Groundwater Report, Fall 1998.



SCALE 1" = ±4.2 MILES

WELLS USED FOR GROUNDWATER MONITORING

MADERA IRRIGATION DISTRICT

GROUNDWATER MANAGEMENT PLAN

M5010101

BOYLE ENGINEERING CORPORATION

FIGURE 2-3

Section 3
Groundwater Basin Conditions

3.1 Characteristics

The groundwater basin underlying the District is known as the Madera Groundwater Basin. The Madera Groundwater Basin also underlies several small water districts and a majority of land in the county that is not within any organized district. Figure 3-1 shows the approximate boundary of the Madera Groundwater Basin. The Lines of Equal Elevation Maps (Figure 3-2), published by the Department of Water Resources, indicate that the flow of the groundwater within the basin is in a southwest direction. However, the flow direction can be influenced on the local level, depending on how much water is being extracted from the aquifer. Heavy localized pumping can cause depressions in the groundwater table.

3.2 Geological Description

Groundwater within the Madera Irrigation District and throughout the San Joaquin Valley Basin occurs under unconfined and confined conditions. Much of the District is underlain by the Corcoran clay, which separates the groundwater into two zones—an upper, unconfined aquifer and a lower, confined aquifer.

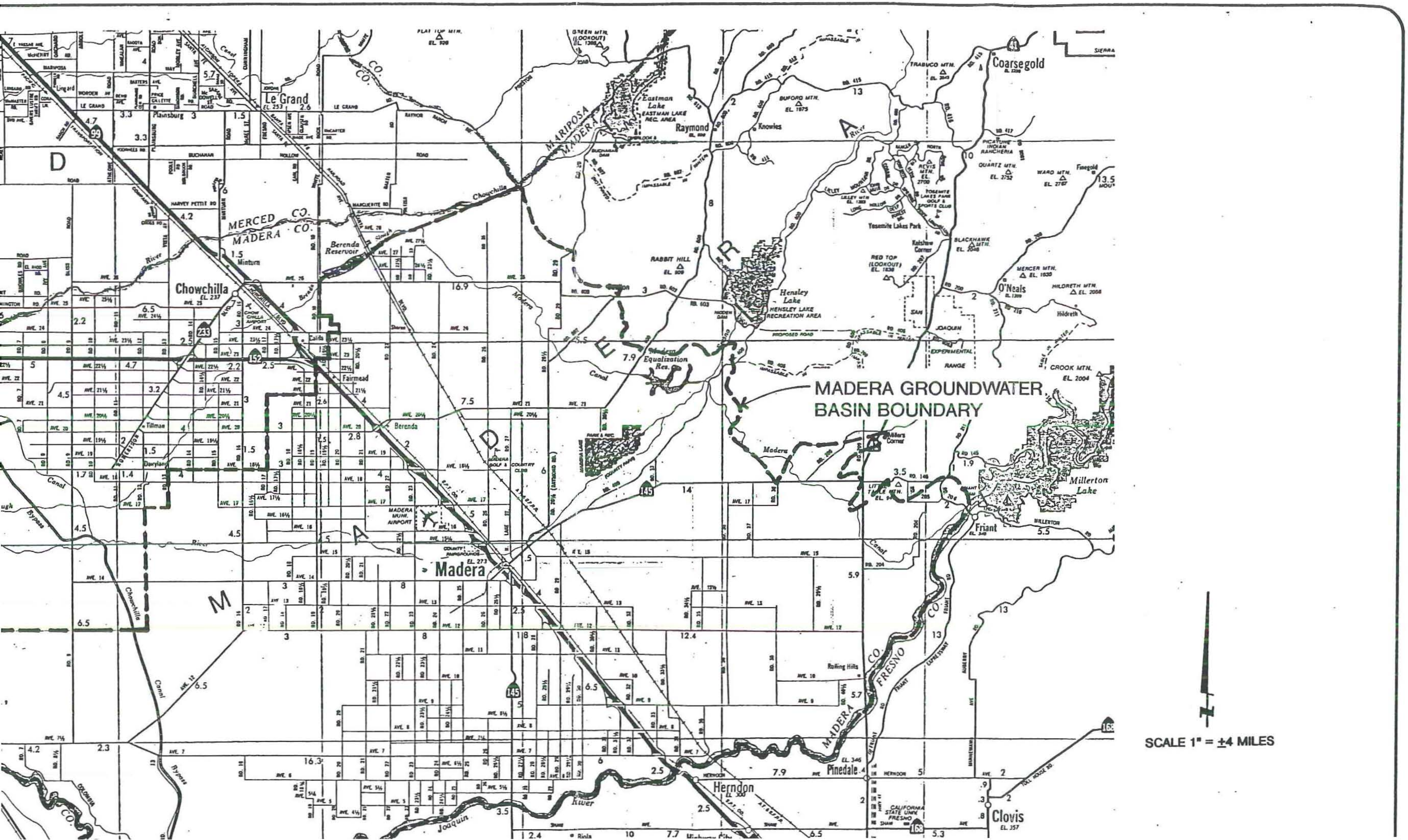
An unconfined aquifer is an aquifer in which the groundwater is not under pressure. In the area underlain by the Corcoran clay, the top of the clay layer is the base of the aquifer. To the west and above the Corcoran clay the top of the unconfined aquifer is the water table. The unconfined aquifer has areas which are locally confined by clay layers that are not continuous over long distances. These clay areas are referred to as isolated clay lenses. Groundwater in the unconfined aquifer flows south and west toward the San Joaquin and Fresno Rivers as discussed in Section 3.1.

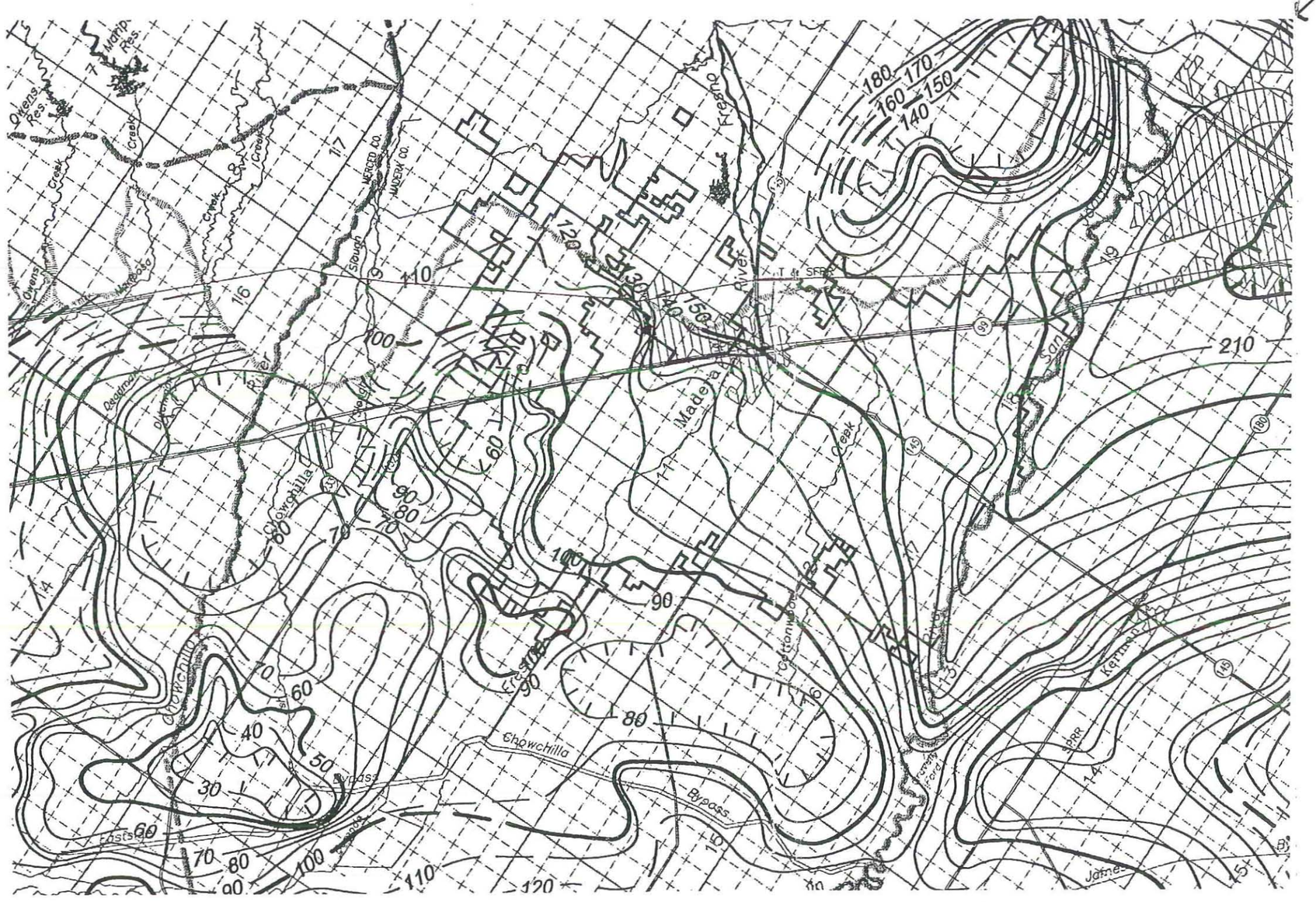
A confined aquifer is an aquifer in which the groundwater is contained under pressure. The extent of the confined aquifer is limited to the extent of the Corcoran clay. The top of the confined aquifer is the bottom of the Corcoran clay layer. There is limited information available about the confined aquifer because so few wells extract groundwater from the confined aquifer.

The thickness of the Corcoran clay layer varies throughout the District but ranges between 0 and approximately 50 feet. The depth to the top of the Corcoran clay layer and ground level varies between 300 and 450 feet.

3.3 Water Level Changes (Mapping)

As mentioned in Section 2.10, the District semiannually monitors an average of 229 wells located throughout the District for water depth levels. This information enables the District to monitor


MADERA GROUNDWATER BASIN BOUNDARY
SCALE 1" = ±4 MILES
MADERA
Chowchilla
Le Grand
Raymond
Coarsegold
Knowles
Eastman Lake
Hensley Lake
Madera Equalization Res.
Millerton Lake
Friant
Fairmead
Berenda
Minturn
Herndon
Pinedale
Clovis
Berenda Reservoir
MERCED CO.
MADERA CO.
MARIPOSA
FRESNO CO.
O'Neals
Yosemite Lakes Park



Source: State of California, The Resource Agency
Dept. of Water Resources, San Joaquin District

SCALE 1" = ±4 MILES

LINES OF EQUAL ELEVATION

SPRING 1997

MADERA IRRIGATION DISTRICT

GROUNDWATER MANAGEMENT PLAN

M5010101

BOYLE ENGINEERING CORPORATION

FIGURE 3-2

groundwater trends and estimate District-wide pumped groundwater quantities. Following the measurements, the District produces a semiannual groundwater report that identifies the conditions of the groundwater basin the past six months.

The Spring 1998 Groundwater Report showed a collective recovery of water in the basin and in adjacent lands. The annual recovery, to a large measure, can be attributed to the immediate past three years' abundant precipitation, San Joaquin River watershed yield, and the corresponding availability of surface water supply. The surface water resource significantly decreases agricultural demands for extraction from the groundwater basin to satisfy consumptive crop uses. However, the basin continues to be in an overdraft state, which resulted from the droughts between 1987 and 1992 and between 1976 and 1977. In addition, the high cost of surface water compared to groundwater pumping costs have resulted in greater groundwater use than might be expected. In certain areas, the basin groundwater level is on average 40 feet, with a maximum of 100 feet below the measured levels preceding the drought years.

The weighted data for spring 1998 reflects an annual recovery in static water levels of 0.47 feet. This data reflects a two-year increase in groundwater levels of 1.23 feet, or a basin recovery of 18,600 acre-feet for the two-year period. Of the 229 measured wells, 176 reflected elevated static levels from common data of 1997. The well level changes range from a recovery of 14.8 feet to a maximum decline of 11.0 feet.

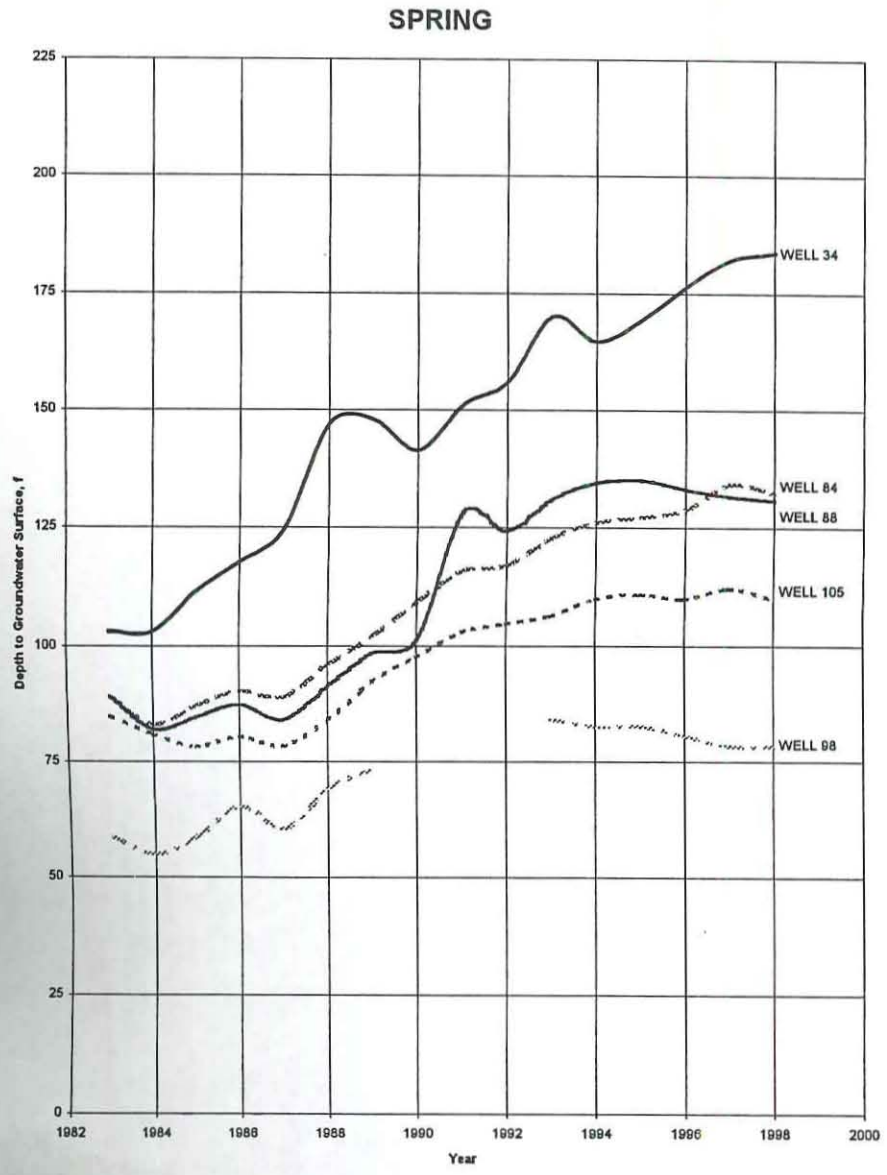
Each year, the Department of Water Resources produces a map entitled *Lines of Equal Elevation in Static Water Level*. This identifies areas of depth to groundwater that are the same. In general, the areas surrounding the city of Madera have experienced a decline in the elevation of the groundwater. This can be attributed to the urban development within and surrounding the city of Madera. Five wells within and surrounding the city of Madera were selected to be representative of the conditions of the groundwater basin within the city. Figure 3-3 shows the variation in the depth to groundwater of these five wells for both the spring and fall seasons. The graph demonstrates the fluctuations in the groundwater table from 1992. Figure 3-4 shows the projected groundwater elevations for the five wells. Urban growth continues to have a negative impact on the groundwater basin that underlies the city of Madera.

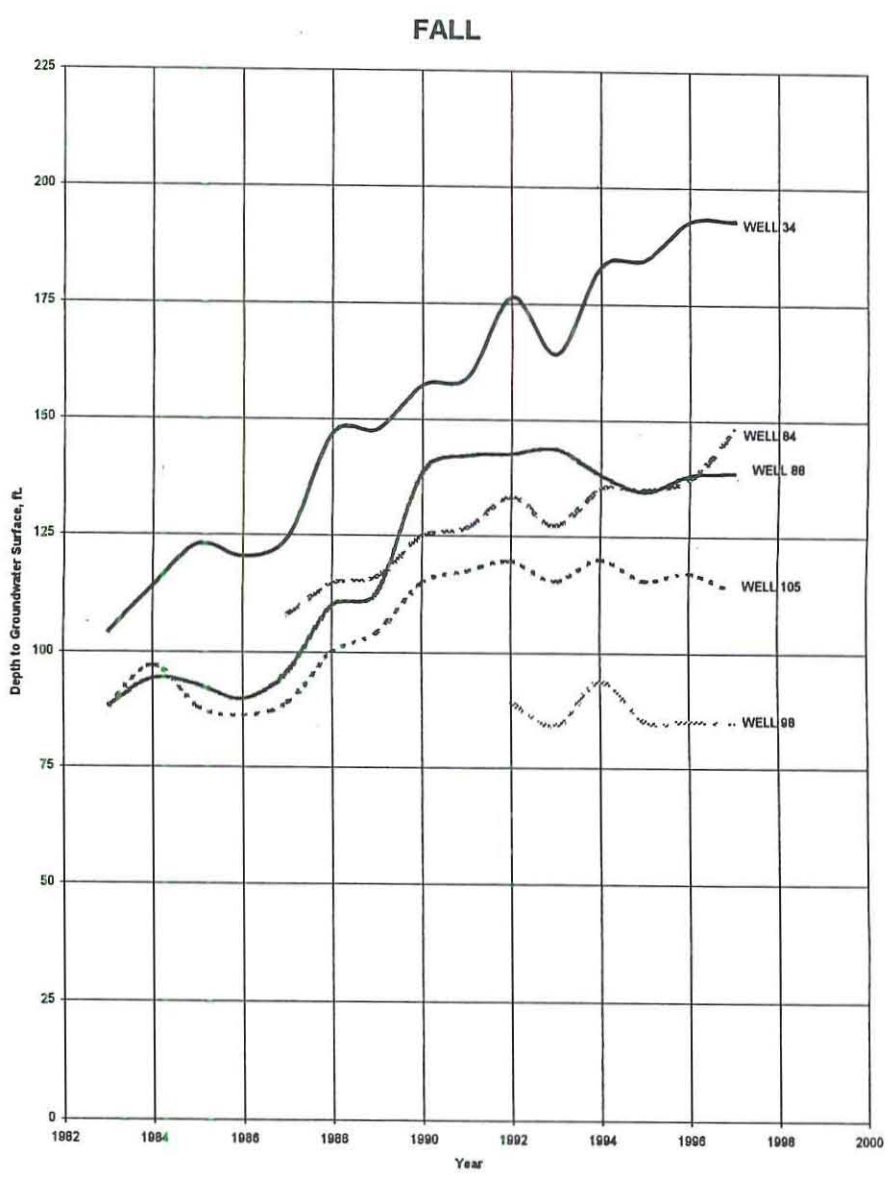
In contrast, the areas near the San Joaquin River and the Fresno River fluctuate depending on weather patterns. In recent years, the groundwater elevation in these areas has significantly increased. Figure 3-5 shows the spring and fall depth to groundwater from 1992 to present, and Figure 3-6 shows the projected groundwater elevations for the five wells. These five wells were selected to be a representative sample for the areas of the basin that lie near the perimeter of the District boundary. In comparing the depth to groundwater for wells near the city of Madera and the depth for wells along the San Joaquin River, it is apparent that the basin underlying the city is in a much more serious state of overdraft.

3.4 Areas of Concern

The primary concern of the District is the continuous decline in the elevation of the groundwater that is a result of urban growth within the District. A related concern is the increase in the cost of surface water

Figure 3-3
Madera Irrigation District
Groundwater Management Plan
Depth to Groundwater Surface of Representative Wells Near City vs. Year[1]



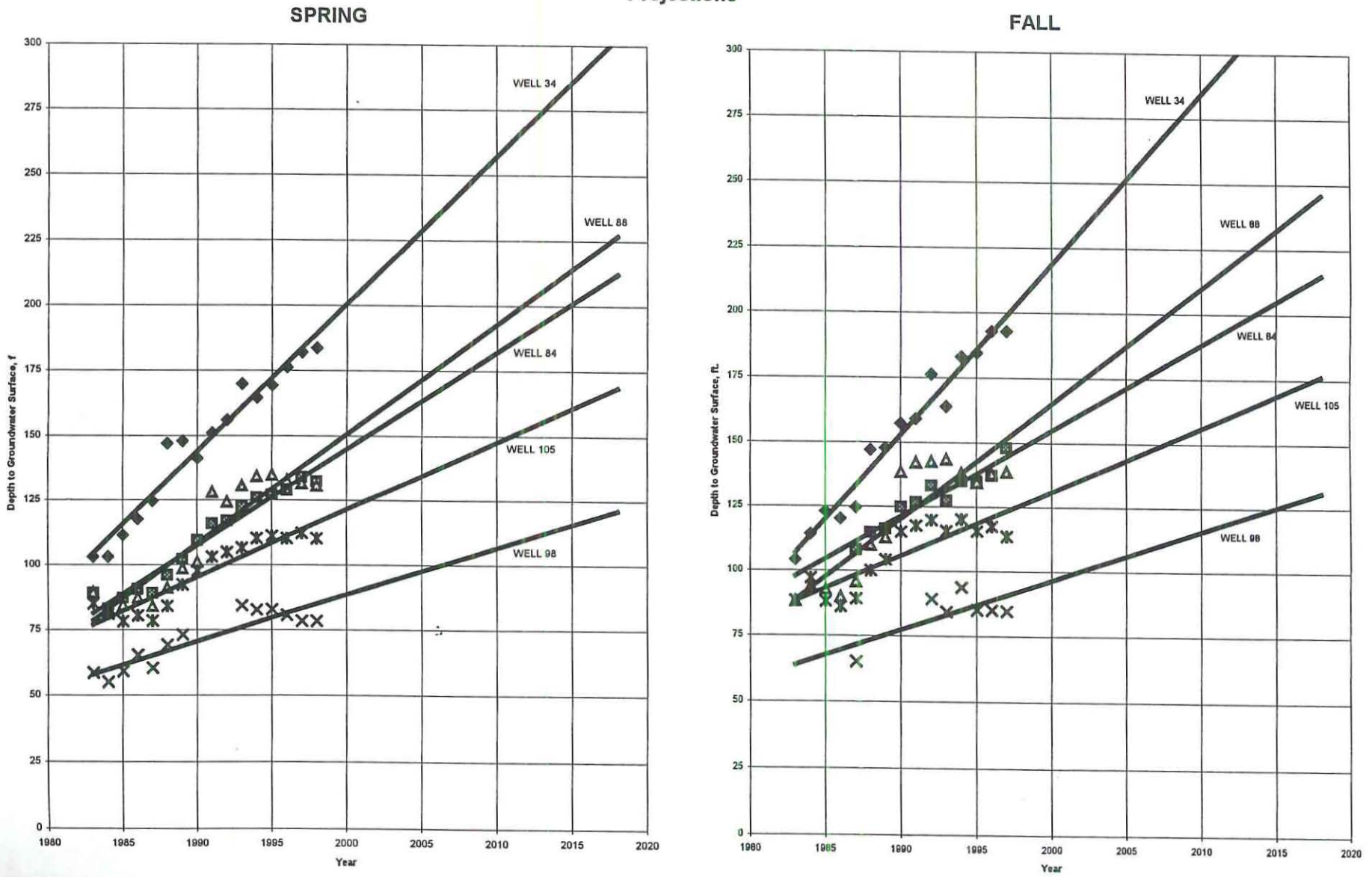


[1]Source of Data: MID Groundwater Survey Data Base

FRM5010101 9/14/98
fig3-3,3-5.xls

BOYLE

Figure 3-4
Madera Irrigation District
Groundwater Management Plan
Depth to Groundwater Surface of Representative Wells Near City vs. Year[1]
Projections

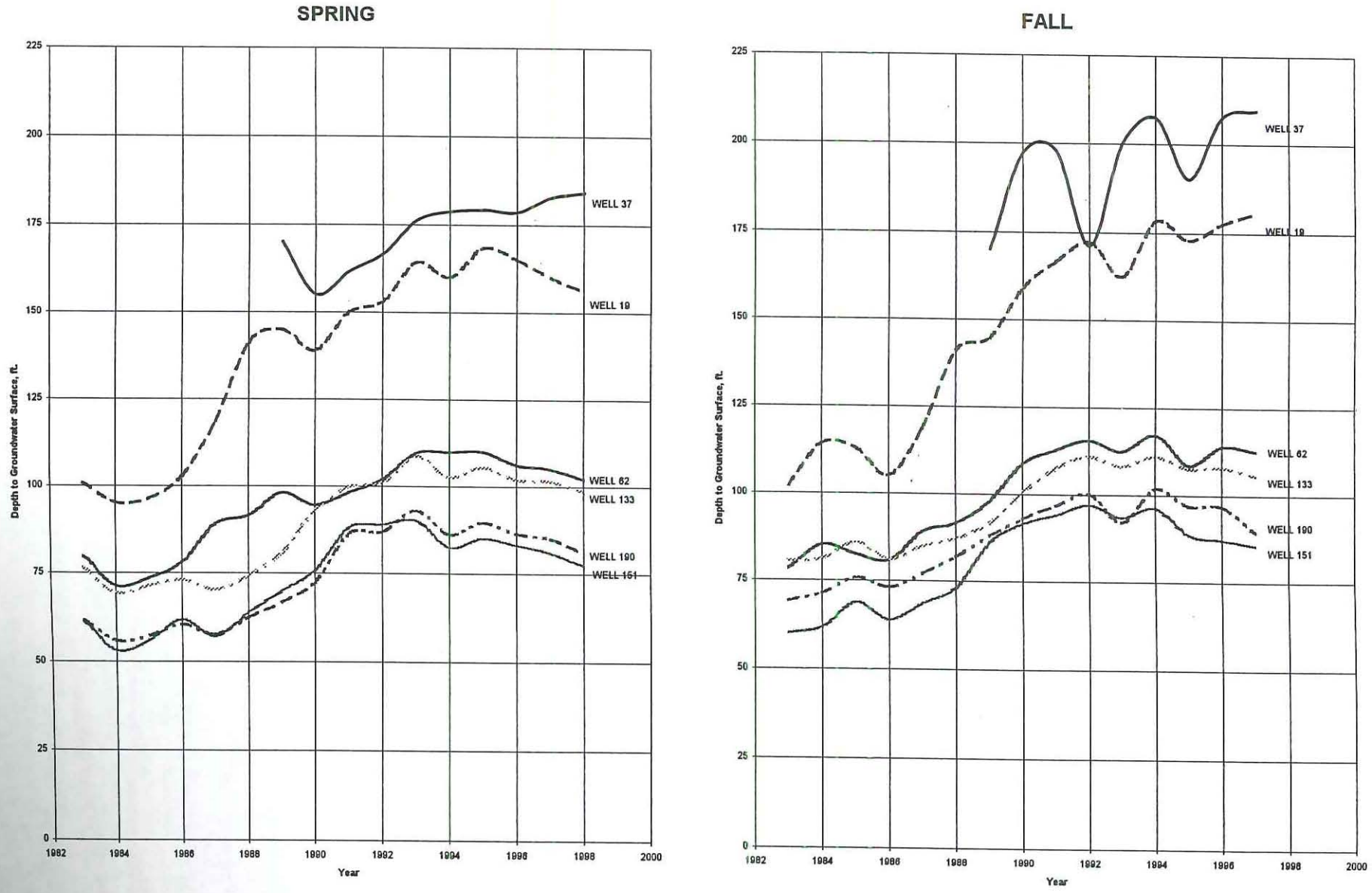


[1]Source of Data: MID Groundwater Survey Data Base

FRM5010101 9/14/98
fig3-4,3-6.xls

BOYLE

Figure 3-5
Madera Irrigation District
Groundwater Management Plan
Depth to Groundwater Surface of Representative Wells Near Perimeter of District vs. Year[1]



[1]Source of Data: MID Groundwater Survey Data Base

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fig3-3.3-5.xls

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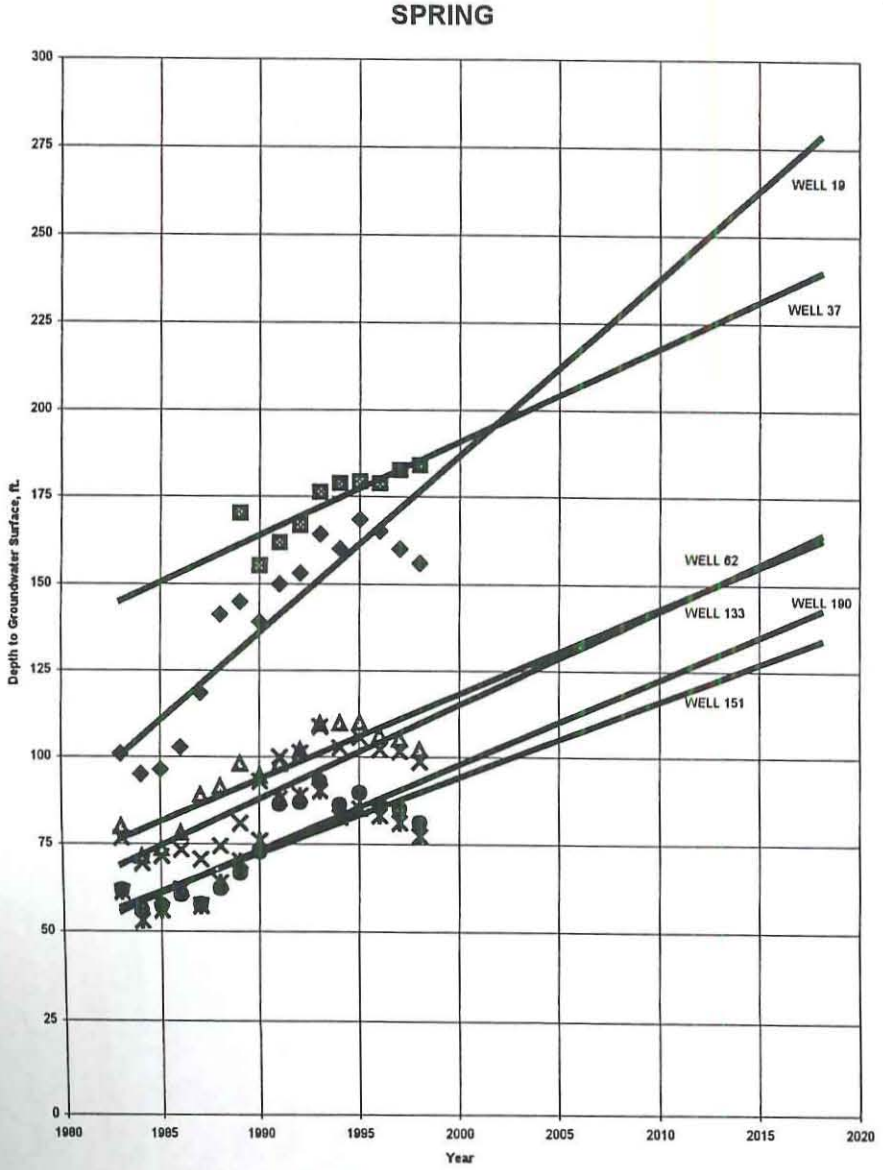
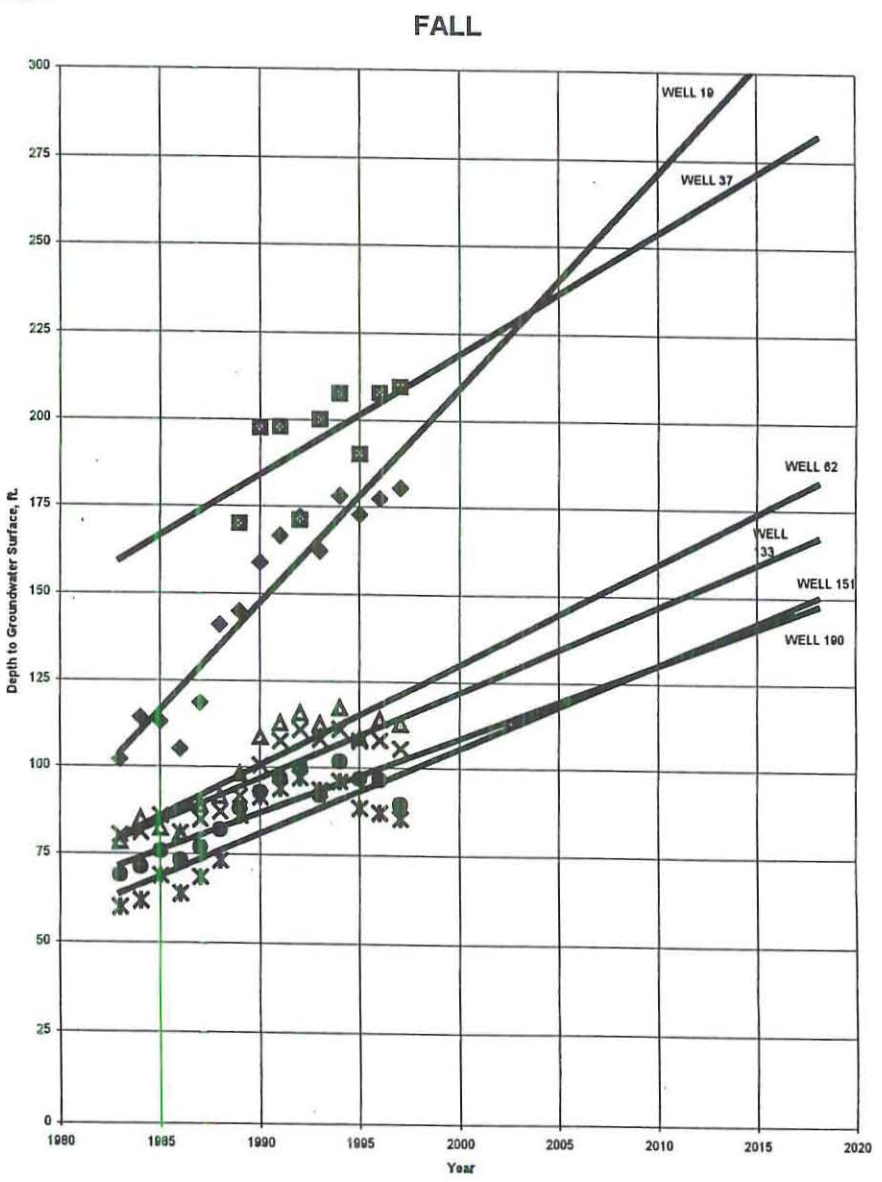
Figure 3-6
Madera Irrigation District
Groundwater Management Plan
Depth to Groundwater Surface of Representative Wells Near Perimeter of District vs. Year[1]
Projections





[1]Source of Data: MID Groundwater Survey Data Base

FRM5010101 9/14/98
fig3-4,3-6.xls

BOYLE

supplied to the District's users. In addition, some of the increased cost in surface water can be attributed to urban growth and the use of groundwater in areas that no longer contribute to recharge.

Agricultural and municipal agencies within the basin are concerned about maintaining adequate supplies of groundwater within the basin. Groundwater is the primary source of water for municipal and agricultural users in the basin. Many agencies like the District are concerned about the continued decline of groundwater levels. The municipalities are especially concerned about the supplies needed to meet the demand as their urban area continues to expand.

An equally important concern that many agencies have expressed is the quality of the groundwater. Currently, the groundwater basin has relatively good quality as discussed in Section 2.9. The concern is in maintaining the quality of groundwater. These items, such as saline intrusion and well construction, are addressed in Section 4 of this GMP.

Section 4
Plan Items

4.1 General

A successful GMP identifies items that may at some time affect the quality of the groundwater basin. Items should be identified despite whether the item is currently a problem. In addition, it is important for all districts and jurisdictions that control areas within the Madera Groundwater Basin to coordinate efforts to protect the basin. The following sections outline several plan items that should be considered when evaluating the condition of the basin.

4.2 Control of Saline Water Intrusion

Permanent degradation of good quality groundwater can occur if poor quality groundwater migrates into aquifer zones containing better quality water. Any degradation in the water quality can seriously affect the usability of the groundwater for various uses. Wide variations in the quality of groundwater, especially in the upper water-bearing zones of the aquifer, can result from soil conditions, soil types, geologic structure, irrigation practices, and irrigation water quality. Increased groundwater pumping can alter historical flow patterns and cause poor quality groundwater to mix with and contaminate the better quality groundwater.

Currently, saline groundwater intrusion is not a problem with the Madera Groundwater Basin. Therefore, the initial focus will be on monitoring the quality of the groundwater. If water quality changes occur, the cause will be investigated by the Regional Water Quality Control Board, and remedial action will be taken by the responsible party under the regulatory direction of the Regional Water Quality Control Board.

4.3 Identification and Management of Wellhead Protection Areas and Recharge Areas

The Federal Wellhead Protection Program (WPP) was established by Section 1428 of the Safe Drinking Water Act Amendments of 1986 and is designed to protect groundwater resources of public drinking water from contamination. This will minimize the need for costly treatment to meet drinking water standards. A wellhead protection area (WPA), as defined by the 1986 Amendments, is *the surface and subsurface area surrounding a water well or wellfield supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water or wellfield.* The basic task of wellhead and recharge area protection is the identification of zones around public water supply wells and groundwater recharge areas where land use must be controlled to minimize the possibility of contamination of the drinking water supply.

Madera Irrigation District does not provide public drinking water to its users. Therefore, WPAs are not currently applicable to this plan.

4.4 Responsibility for the Mitigation of Contaminated Groundwater

Groundwater contamination can originate from many sources or activities. Generally, once the groundwater table becomes contaminated, the cleanup of the contaminant is very complex and expensive. There are several agencies that play a role in mitigating groundwater contamination. Among them is the California Regional Water Quality Control Board (RWQCB), the California Department of Toxic Substances Control (DTSC), and the U.S. Environmental Protection Agency (EPA). Each agency has its own regulatory authorities and expertise to contribute to the mitigation and the degree to which each agency participant is dependent upon the nature of the problem. The primary role of the Madera Irrigation District is to report any contamination that they become aware of to the proper regulatory agency.

4.5 Administration of a Well Abandonment and Well Destruction Program

State regulations require that all unused or inactive wells be properly maintained as defined by the *Water Well Standards: State of California DWR Bulletins 74-871 and 74-90.* State regulations also require all inactive wells that are not being properly maintained to be properly destroyed. Improperly maintained wells act as a means for mixing of groundwater of different quality. Wells that are unpumped create a much greater threat than those wells that are periodically pumped. This is due in part to the fact that pumping will normally remove contaminants that may have migrated during idle periods.

Madera County has a similar ordinance regarding well destruction. The enforcement of this ordinance will remain in the control of Madera County.

4.6 Mitigation of Overdraft Conditions

Groundwater overdraft can lead to a variety of problems that include land subsidence and an increase in the cost of pumping. Overlooking overdraft can result in a limited supply of water during drought years, which would severely impact the long-term viability of the District, which is predominantly agriculture. Groundwater overdraft is due to an imbalance in the rates of extraction and replenishment. Several methods will help in the correction of overdraft. These methods are as follows:

- A decrease in the amount of extraction to match the rate of replenishment
- Increase in the replenishment to match or exceed the extraction
- Balance replenishment and extraction of the groundwater

Currently, the District is defined as being in a condition of overdraft, which is apparent from the observed decline in the depth to groundwater. Factors that affect the future rate of overdraft include the following:

- The future water demand within and adjacent to the District
- Future pumping rates within and adjacent to the District

Several mitigative measures can be taken to limit the overdraft problems. One such measure is for the District to increase the number of recharge areas maintained by the District. The District will actively pursue the acquisition of land that will be designated as groundwater recharge basins. In addition, the District will continue to support unlined canals and natural streams, such as the Fresno River, the channel under Fanchi weir, and Cottonwood Creek, as a means of conveying large amounts of surface water to the growers.

Another mitigative measure is to increase and modify the irrigation practices and efficiencies. This may be the most practical way to manage the District's groundwater extractions. This will reduce water use with minimal impacts to land use and the significant economic impacts are less likely to result from this approach. The efficiency of irrigation systems can vary significantly based on physical site conditions, climate, method of irrigation, irrigation system design, and management. There are several steps that can be taken that will result in a higher irrigation efficiency. These steps generally fall into two categories. These are:

- Installation/retrofitting of existing systems with improved equipment/technology and/or installing new systems using technology on existing or proposed future plantings.

- Implementing improved irrigation water management procedures of existing irrigation systems.

Several items will be actively supported by the District in an attempt to increase the irrigation efficiency. These items are listed below.

- Installation of flow meters will provide useful information needed to determining irrigation efficiency.

- Modification of the irrigation frequency and the duration will also help. During irrigation it is important to consider both the soil moisture conditions and the drop water requirements. The correct time to stop irrigation is when the soil reservoir has been filled and the water requirement for the crops has been satisfied.

- Improve the application uniformity used during irrigation. Irrigation systems will be designed to best utilize the available water and minimize the amount of water lost to runoff.

Another mitigative measure to correct the overdraft problem is to import additional surface water supply. The District will actively seek to make its sources of surface water more available. They will coordinate with surrounding districts and regulatory agencies in an attempt to acquire additional surface water supply. The more dependable surface water is, the less dependent the farmer will be to the groundwater.

In addition to acquiring additional surface water supply, the District will explore alternatives to be able to offer the growers economic incentives to use less groundwater. Again, the District will work with

local regulatory agencies in an attempt to be able to provide adequate surface water at an economically feasible cost.

4.7 Replenishment of Groundwater Levels and Storage

The District currently achieves groundwater replenishment using several different methods, including the following:

- The District currently has eight designated recharge basins, as shown on Figure 1-1, that are used to replenish the water levels within the District.
- There are currently 90 miles of unlined canals within the District's distribution/conveyance system. In addition, there are 102 miles of natural streams. Both the unlined canals and natural streams convey a large amount of water. A percentage of this water percolates and reaches the groundwater table.
- A percentage of the water applied to the fields of irrigation will percolate and reach the groundwater table.

To increase the replenishment of the groundwater table, additional surface water must be absorbed within the basin either by increasing surface water irrigation or by direct recharge areas. This will be accomplished by the District actively pursuing additional land designated for groundwater recharge. In addition, the District will encourage farmers to use surface water instead of groundwater. This is accomplished by investigating pricing mechanisms that will give the farmer an economic incentive to use the surface water when available.

The District currently monitors well water levels in about 229 wells located throughout the District. These measurements are taken once in the spring and once in the fall and are reported to the Bureau of Reclamation, as discussed in Section 2.10. The purpose of this water level monitoring is to identify areas of overdraft and provide information that will allow computation of the changes in groundwater quality and storage.

4.8 Monitoring of Groundwater Extracted by Water Producers

Monitoring the groundwater extracted by the water producers is best accomplished by placing flow meters on all the irrigation wells used to pump groundwater to the surface for irrigation. The District will recommend to landowners that an adequate flow meter be placed on their irrigation wells. The flow meter totalizer will indicate the total amount of water that was pumped. Growers will know their water use and can use this information for on-farm water conservation. In addition, the District will encourage the landowners to make this information available to the District. The District will implement this monitoring program as part of this GMP.

4.9 Facilitating Conjunctive Use Operations

Conjunctive use operation of a groundwater basin is defined in DWR Bulletin 118-80 as:

> *Operation of a groundwater basin in coordination with a surface water reservoir system. The basin is intentionally recharged in years of above average precipitation so groundwater can be extracted in years of below average precipitation when surface water supplies are below normal.*

In some years, the surface water supply is greater than the basin water demand; in other years. The surface water supply is less than the basin water demand. In wet years, surface water is used to recharge the groundwater basin with recharge being achieved either directly by surface recharge or by using surface water instead of groundwater whenever possible.

The District is in a conjunctive use program with the Bureau of Reclamation. Both agencies will work together to achieve the goals of this GMP.

4.10 Identification of Well Construction Policies

Improperly constructed wells serve as a primary means for contaminating the groundwater. Contaminated groundwater results from the mixing of water between aquifers with differing quality. Madera County has enacted and is responsible for enforcing the County Well Ordinance that regulates well construction. When a new well is drilled, a well construction permit is required, and a well driller's report must be filed with the Department of Water Resources and the County. This will ensure proper construction of wells within the District.

4.11 Construction and Operation of Groundwater Management Facilities

The District will actively pursue additional lands to be used as recharge facilities. Where possible, recharge activities will be coordinated with flood control activities. Following acquisition of land, the District would construct recharge basins that would maximize the amount of recharge of the groundwater table. These facilities would be located in areas where extraction can occur in times of limited surface supply. Such extraction would be conducted in a manner that allows incorporation of groundwater into District distribution facilities and only to the extent that there are no unreasonable adverse impacts on landowners and growers in the District. Trained District personnel will operate the facilities.

4.12 Development of Relationships with Federal, State, and Local Regulatory Agencies

Relationships between the groundwater management districts and the various regulatory agencies is an important part of an effective plan. The plan will be submitted to the Department of Water Resources

and the RWQCB. Groundwater management activities will be coordinated with these regulatory agencies and the agencies that also are a part of the Madera Groundwater Basin.

4.13 Review of Land Use Plans and Coordination with Land Use Planning Agencies

An important components of developing a groundwater management plan is the review of land use plans for the surrounding area or basin and coordinating efforts with regional and local land use planning agencies. Urbanization has a significant impact on groundwater management. It is important to plan for the impacts a developing area can have on the groundwater basin by compensating in other areas within the District. Compensation can be in a variety of forms, including adding recharge basins, importing additional surface water supplies, and limiting pumping within the developed area. Within developing areas, recharge basins should be planned for prior to development. Madera Irrigation District will work closely with Madera County and the City of Madera in evaluating land use plans to ensure the groundwater table is protected.

SECTION 5: GROUNDWATER EXPORTATION, GROUNDWATER BANKING, IMPORTATION OF FOREIGN WATER, AND USE OF DISTRICT FACILITIES FOR SUCH PURPOSES

Chapter .100
Rules and Regulations Pertaining to Groundwater Banking; Importation of Foreign Water For the Purpose of Groundwater Banking; Exportation of Groundwater Outside the District; and Use of District Facilities for such Purposes.

.100.010 PURPOSE AND INTENT.

A. The lands within Madera Irrigation District ("District") are heavily dependent upon groundwater. The groundwater basin(s) underlying the District and surrounding areas are severely overdrafted.

B. It is essential to the continued prosperity of the landowners and water users within the District that the quality and quantity of the groundwater supply be maintained to meet the demands of District landowners and water users.

C. Areas within the District are or could be or become subject to land subsidence due to the extraction of groundwater.

D. The direct or indirect transfer of groundwater outside the District may have significant environmental impacts on the area within the District including, but not limited to, increased groundwater overdraft; land subsidence; uncontrolled movement of contaminated groundwater; uncontrolled movement of poor quality or contaminated groundwater; the lowering of groundwater levels; increased groundwater or soil degradation; and loss of aquifer capacity due to land subsidence.

E. The direct or indirect transfer of groundwater outside the District may have significant economic impacts on areas within the District including, but not limited to, loss of arable agricultural land; increased pumping costs due to lowered groundwater levels; increased groundwater quality treatment costs due to movement of contaminated or poor quality groundwater; replacement of wells due to declining groundwater levels, and replacement of damaged wells, conveyance facilities, roads, bridges and other structures due to land subsidence.

F. The importation of water originating outside of Madera County (whether or not conveyed through or pooled with facilities located in or adjacent to Madera County) for the purpose of Groundwater Banking such water ("Foreign Water") could, if unregulated, introduce water of an inferior quality into District aquifers, resulting in significant economic and environmental impacts on areas within the District, including, but not limited to, those specified in Paragraphs D. and E., above .

G. As used herein the term "Groundwater Banking" means the percolation, injection, or other recharge of a supply of water for the purpose of later extraction and delivery of such water outside of the District. Groundwater Banking can be reasonable and beneficial if it can be accomplished without:

(1) causing or increasing an overdraft of groundwater underlying the District;

(2) adversely affecting the ability of other groundwater users to use, store, or transmit groundwater within any aquifer(s) underlying the District (for example by utilizing storage that might otherwise be subject to natural or passive recharge and thus depriving other groundwater users of their use of the aquifer and the groundwater derived therefrom) ;

(3) adversely affecting the reasonable and beneficial uses of groundwater by other groundwater users within the District;

(4) resulting in, expanding, or exacerbating degradation of the quality or quantity of surface or groundwater within the District, or groundwater basins and aquifers within the District;

(5) resulting in injury to a water replenishment, storage, restoration, or conveyance project or facility;

(6) adversely affecting the surface or subsurface of neighboring or nearby lands, or the trees, vines, or crops growing or to be grown thereon;

(7) adversely affecting the economy or environment of the area within the District; or

(8) adversely affecting the recharge and storage ability on adjacent lands where passive recharge may take place.

H. For Groundwater Banking projects all or a portion of which will be located within the District, it is essential that the District be the agency that determines whether a permit should be issued to allow groundwater banking, exportation of groundwater, or importation of foreign water, within such areas. Without a permit process which allows public notice, public hearings, and compliance with environmental and other appropriate requirements, there would be no or inadequate local control over such groundwater banking, exportation of groundwater, or importation of foreign water, nor a method to insure that groundwater banking will meet the requirements of Paragraph G., above.

I. The District, as the agency most familiar with local conditions affecting groundwater, should adopt reasonable regulatory measures in relation to exportation of groundwater, Groundwater Banking, and the importation of Foreign Water for the purpose of Groundwater Banking.

J. California Water Code section 1810(d) provides that use of a water conveyance facility to transfer water may be denied if the use of the water conveyance facility will injure any legal user of water, will unreasonably affect fish, wildlife or other in-stream beneficial uses, or will unreasonably affect the overall economy or the environment of the county from which the water is being transferred.

.100.020 TITLE.

These provisions shall be known as "Rules and Regulations Pertaining to Groundwater Banking; Importation of Foreign Water For the Purpose of Groundwater Banking; Exportation of Groundwater Outside the District; and Use of District Facilities for such Purposes."

.100.030 DEFINITIONS

The terms used in this Chapter have the following meanings, unless otherwise expressly provided:

A. "Damage Prevention Plan" means a written plan which specifically details the problems that may occur as a result of the operation of the project and details what actions will be

taken by the Applicant to mitigate or eliminate the problems in order to prevent damage to the site and surrounding properties.

B. "Emergency Action Plan" means a written plan which provides a complete and detailed evaluation of potential project failures that can occur during operation of the project and which details what actions the Applicant will take to prevent or minimize damage to the project and protect the public and surrounding properties.

C. "Exportation of Groundwater" means the extraction of groundwater from any well within the boundaries of the County and located on or under lands subject to this Chapter and used on lands which are outside of the boundaries of the County, unless the lands on which the water is being used are contiguous to the lands where the water is extracted, and are owned by the same landowner.

D. "Foreign Water" means water originating outside of Madera County, whether or not conveyed through or pooled with facilities located in or adjacent to Madera County, which is imported into Madera County for purposes of groundwater banking.

E "Groundwater" means water that occurs beneath the land surface and fills the pore spaces of the alluvium, soil, or rock formation in which it is situated.

F. "Groundwater Banking" means the importation of a surface supply of water that is percolated or injected to groundwater for storage, or placed underground by means of in-lieu recharge, for later extraction and delivery.

G. "Groundwater Management Plan" means a groundwater management plan adopted pursuant to California Water Code section 10750 et seq.

H. "Local water agencies" means public agencies, districts, or mutual water companies located wholly or partly within Madera County which have as their primary function the supplying of water for domestic, agricultural, industrial, or municipal purposes.

I. "Operations and Maintenance Plan" means a written plan which provides complete details of how the Applicant plans to

operate and maintain the project after construction is completed. This Plan must show who will assume the responsibility for the operation and maintenance of the project and provide an organizational chart detailing the job responsibilities of each position shown.

J. "Person" means an individual, partnership, company, corporation, unincorporated association, public agency, or other form of business entity.

K. "Project Monitoring Plan" means a written plan which details how the Applicant will monitor the project site and properties outside of the project boundaries for possible damage from operation of the project.

L. "Project Water Measurement and Water Loss Accountability Plan" means a written plan which details how water into and out of the project will be measured and how the Applicant plans to calculate or otherwise account for project water losses. The Plan must provide details of what types of measuring equipment will be used on the project and where it will be installed.

M. "Safety Action Plan" means a written plan which provides information on who will be responsible for implementing the safety requirements for the project and which also provides details of all project safety requirements, including those needed to protect the public and surrounding properties.

.100.040 LAND SUBJECT TO ARTICLE.

This Chapter shall be applicable to all lands within the District boundaries. If a portion of a Groundwater Banking project lies within the District, and a portion lies outside the boundaries of the District, then this Chapter shall apply to that portion that lies within the boundaries of the District.

.100.050 EXPORTATION OF GROUNDWATER BEYOND DISTRICT BOUNDARIES.

A. REQUIREMENT OF PERMIT:

Except under a permit granted pursuant to this Section, no groundwater extracted from any well within the boundaries of the District and located on or under lands subject to this Chapter, shall be used on lands which are outside of the boundaries of the District, unless the lands on which the water

is being used are contiguous to the lands where the water is extracted, and are owned by the same landowner. A permit is required under this Section whether or not such exportation is pursuant to Groundwater Banking that is also subject to a separate permit under Section __.100.060. A permit for exportation under this Section may cover all exportation of water to a specified water user in amounts specified in the permit for a period not to exceed five years from the granting of the permit, after which a new permit shall be required.

B. APPLICATION FOR PERMIT:

Applications for permits under this Section shall be made to the District on forms provided by the District and shall contain all information and reports required therein. An Application shall be accompanied by a report ("Report") prepared at the applicant's expense by a qualified Registered Civil Engineer or Geologist, versed in geologic and hydraulic testing, which shows:

a. The source of the water to be exported.

b. The quantity and quality of water proposed to be exported.

c. The location to which and purpose for which the water is to be exported, including the reasonable and beneficial use to which the water is to be put.

d. The geologic and hydrologic properties of the aquifers from which extraction will be made, including possibilities or likelihood of subsidence problems.

e. Percolation tests to determine the ability of the aquifer(s) to recharge.

f. Clay layers and their effect on percolation.

g. The applicant's Project Water Measurement and Water Loss Accountability Plan.

h. The applicant's Damage Prevention Plan.

i. The applicant's Project Monitoring Plan.

j. The applicant's Safety Action Plan.

k. The applicant's Emergency Action Plan.

l. The location, size, spacing and depths of extraction wells.

m. Horizontal migration of groundwater from surrounding locations.

n. The means and criteria for determining any effects on surrounding lands and their groundwater supplies.

o. Such other matters as the District may require.

Five copies of the Application, Report, and other information submitted shall be provided.

C. ENVIRONMENTAL IMPACT REPORT:

An Application for extraction permit under this Section is deemed to be a "project" under the California Environmental Quality Act ("CEQA") and its implementing regulations ("CEQA Guidelines"). In order to ensure that decision-makers have sufficient information on the potential impacts of such a project, the preparation and certification of an Environmental Impact Report ("EIR") is hereby required for each such project application. The EIR must conform to CEQA, CEQA Guidelines, and all District requirements. The EIR shall be prepared, and shall be paid for by the applicant, in accordance with the District's CEQA implementation procedures.

D. ADDITIONAL STUDIES AND REQUIREMENTS:

If, after receiving the Report as required by Paragraph B., above, and before or after receiving the EIR, the District Engineer desires more information, he or she may require preparation by applicant, at applicant's expense, of any additional geologic or hydrologic studies, or other information or studies, that he or she deems necessary to obtain information needed in order to make a recommendation on the application. The Engineer may review the application with potentially affected landowners and water users, with the staff of applicable local, state and federal agencies and with, and with the Madera County Water Oversight Committee.

E. REVIEW OF APPLICATION.

After reviewing the Application, Report, Environmental Impact Report, and any additional studies and other information required under Paragraph D., above, the District Engineer shall prepare a written report, with all comments attached thereto, in which he or she either shall recommend denial of the permit, or granting the permit with suggested conditions for the project. The written report also shall include recommendations concerning the adequacy of the EIR. All documents shall be filed with the Secretary of the Board.

F. FINDINGS REQUIRED FOR PERMIT APPROVAL OR DENIAL BY THE BOARD:

The permit may only be approved if the District finds that the proposed extraction and exportation will not have detrimental impacts on the District by determining that:

(1) The extraction and exportation will not cause or increase an overdraft on parts or all of the groundwater basins underlying the District.

(2) The extraction and exportation will not adversely affect the ability of other groundwater users to use, store, or transmit groundwater within any aquifer(s) underlying the District.

(3) The extraction and exportation will not adversely effect the reasonable and beneficial uses of groundwater by other groundwater users within the District.

(4) The extraction and exportation will not result in, expand, or exacerbate degradation of the quality or quantity of surface or groundwater within the District, or groundwater basins and aquifers within the District.

(5) The extraction and exportation will not result in injury to a water replenishment, storage, restoration, or conveyance project or facility;

(6) The extraction and exportation will not adversely affect the overall economy or environment of the area within the District.

If the Board determines that one or more of the findings required by this Section cannot be made, the Board shall deny the permit application. The basis for any such denial shall be reflected in the Board's official record of proceedings.

G. RE-APPLICATION AFTER BOARD DENIAL:
Re-application for a permit that has been denied by the Board may not be filed until one year after the date of denial.

H. PAYMENT OF FEES.
The applicant at the time of filing shall pay such fees as are or may be established by the Board for processing the application and the giving and publication of required notices.

I. NOTICE TO LANDOWNERS:
Upon the filing of an application with the District, the District shall give written notice to all owners of lands located within five miles of the exterior boundaries of the proposed extraction site, setting forth the name of the applicant, a description of the project, a description or map of the land involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. In addition thereto, the District shall cause to be published pursuant to Government Code §§ 6060 and 6061.3 a notice that the application has been filed, setting forth the name of the applicant, a description of the project, a description or map of the land involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. The District shall retain one copy of the application documents, EIR, and any comments or reports thereon and make them available for public inspection and copying in accordance with the Public Records Act.

J. NOTICED PUBLIC HEARING:
No permit shall be issued without a noticed public hearing before the Board pursuant to Government Code §§ 6060 and 6061.3. The notice shall be given by the Secretary of the Board after completion and filing of the Engineer's Report and the environmental review process. The notice shall specify the time and place of the hearing, the location from which the water is proposed to be extracted and exported, and a general description of the project and that any interested person may submit evidence at the hearing. At least fifteen days must

elapse between filing the documents with the Secretary of the Board and the date of the hearing.

K. PROCEDURES FOR CONDUCTING HEARING:
At the hearing, the Application, Report, Environmental Impact Report, additional submittals, comments from the public and the Engineer's Recommendation shall become evidence. The applicant and members of the public, or their representatives, may testify and introduce evidence in favor of, or in opposition to, the project.

L. DECISION AFTER HEARING.
At the conclusion of the hearing, the Board shall approve the application and grant the permit if the Board makes the findings set forth in Paragraph F., above, subject to the terms and provisions authorized in Paragraph M., below. If the Board is unable to make the findings set forth in Paragraph F., above, then the application shall be denied and no permit shall be issued. The Board shall direct that written findings are prepared in conformity with its decision and shall adopt said findings when prepared.

M. TERMS AND CONDITIONS OF PERMIT:
If an application is approved, the Board may impose such terms and conditions thereon as the Board deems necessary to prevent adverse effects on the aquifer(s), the quality and quantity of the groundwater supply, adjacent or neighboring lands, or the environment.

N. REVOCATION OF PERMIT:
Any violation of the terms and conditions of the permit will constitute grounds for revocation of the permit after a duly noticed public hearing thereon held in the manner described in the preceding Paragraphs.

O. INSPECTIONS:
If an application is approved and a permit granted, then the applicant's acceptance of the permit shall constitute the applicant's consent for the District Engineer, or his representatives, at any reasonable time, and from time to time, to enter the project site and make such observations and measurements as are deemed necessary to assure that the project is being carried out under the terms of the permit.

representatives, at any reasonable time, and from time to time, to enter the project site and make such observations and measurements as are deemed necessary to assure that the project is being carried out under the terms of the permit.

P. DECISION OF BOARD FINAL:
The decision of the Board in any matter set forth herein, other than criminal penalties, shall be final upon its adoption of written findings.

Q. JUDICIAL REVIEW:
Any judicial action to set aside, annul, or vacate any decision or action taken by the Board pursuant to this Chapter shall be filed pursuant to California Code of Civil Procedure Section 1094.5 and within the time limits prescribed in California Code of Civil Procedure section 1094.6.

__.100.060 GROUNDWATER BANKING.

A. REQUIREMENT OF PERMIT:
No person, who is subject to this Ordinance, other than the District, shall engage in Groundwater Banking on or under land subject to this Ordinance without first obtaining a permit from the District in accordance with this Section. A permit for Groundwater Banking under this Section may cover all Groundwater Banking for amounts of storage specified in the permit for a period not to exceed five years from the granting of the permit, after which a new permit shall be required. A permit for Groundwater Banking is not a permit for importation of Foreign Water to the Groundwater Bank (which importation shall require a separate permit under Section __.100.070), and it is not a permit for exportation of groundwater beyond District boundaries (which exportation shall require a separate permit under Section __.100.050).

B. APPLICATION FOR PERMIT:
Applications for permits under this Section shall be made to the District on forms provided by the District and shall contain all information and reports required therein. An Application shall be accompanied by a report ("Report") prepared at the applicant's expense by a qualified Registered Civil Engineer or Geologist, versed in geologic and hydraulic testing, which shows:

a. The location, plans, and specifications of the proposed project.

c. The method of placement of water to be banked

d. The quantities of groundwater to be extracted.

e. The geologic and hydrologic properties of the aquifers into which recharge will occur and from which extraction will be made, including possibilities or likelihood of subsidence problems.

f. Percolation tests to determine the ability of the aquifer(s) to recharge.

g. Clay layers and their effect on percolation.

h. Design of spreading areas.

i. The applicant's Operations and Maintenance Plan.

j. The applicant's Project Water Measurement and Water Loss Accountability Plan.

k. The applicant's Damage Prevention Plan.

l. The applicant's Project Monitoring Plan.

m. The applicant's Safety Action Plan.

n. The applicant's Emergency Action Plan.

o. The location, size, spacing and depths of extraction wells.

p. Horizontal migration of groundwater from surrounding locations.

q. The means and criteria for determining any effects on surrounding lands and their groundwater supplies.

r. Such other matters as the District may require.

Five copies of the Application, Report, and other information submitted shall be provided.

C. ENVIRONMENTAL IMPACT REPORT:
An Application for Groundwater Banking under this Section is deemed to be a "project" under the California Environmental Quality Act ("CEQA") and its implementing regulations ("CEQA Guidelines"). In order to ensure that decision-makers have sufficient information on the potential impacts of such a project, the preparation and certification of an Environmental Impact Report ("EIR") is hereby required for each such project application. The EIR must conform to CEQA, CEQA Guidelines, and all District requirements. The EIR shall be prepared, and shall be paid for by the applicant, in accordance with the District's CEQA implementation procedures.

D. ADDITIONAL STUDIES AND REQUIREMENTS:
If, after receiving the Report as required by Paragraph B., above, and before or after receiving the EIR, the District Engineer desires more information, he or she may require preparation by applicant, at applicant's expense, of any additional geologic or hydrologic studies, or other studies or information, that he or she deems necessary to obtain information needed in order to make a recommendation on the application. The Engineer may review the application with potentially affected landowners and water users, with the staff of applicable local, state and federal agencies, and with the Madera County Water Oversight Committee.

E. REVIEW OF APPLICATION.
After reviewing the Application, Report, Environmental Impact Report, and any additional studies and other information required under Paragraph D., above, the District Engineer shall prepare a written report, with all comments attached thereto, in which he or she either shall recommend denial of the permit, or granting the permit with suggested conditions for the project. The written report also shall include recommendations concerning the adequacy of the EIR. All documents shall be filed with the Secretary of the Board.

F. FINDINGS REQUIRED FOR PERMIT APPROVAL OR DENIAL BY THE BOARD:
The permit may only be approved if the District finds that the proposed Groundwater Banking project will not have detrimental impacts on the District by determining that:

(1) The project will not adversely affect the ability of other groundwater users to use, store, or transmit groundwater within any aquifer(s) underlying the District (for example by utilizing storage that might otherwise be subject to natural or passive recharge and thus depriving other groundwater users of their use of the aquifer and the groundwater derived therefrom).

(2) The project will not adversely affect the reasonable and beneficial uses of groundwater by other groundwater users within the District.

(3) The project will not result in, expand, or exacerbate degradation of the quality or quantity of surface or groundwater within the District, or groundwater basins and aquifers within the District.

(4) The project will not result in injury to a water replenishment, storage, restoration, or conveyance project or facility.

(5) The project will not adversely affect the surface or subsurface of neighboring or nearby lands, or the trees, vines, or crops growing or to be grown thereon.

(6) The project will not adversely affect the overall economy or environment of the District.

(7) The project will not cause or increase an overdraft of groundwater underlying the District.

(8) The project will not adversely affect the storage ability on adjacent lands where passive recharge may take place.

If the Board determines that one or more of the findings required by this Section cannot be made, the Board shall deny the permit application. The basis for any such denial shall be reflected in the Board's official record of proceedings.

G. RE-APPLICATION AFTER BOARD DENIAL:
Re-application for a permit that has been denied by the Board may not be filed until one year after the date of denial.

H. PAYMENT OF FEES.
The applicant at the time of filing shall pay such fees as are or may be established by the Board for processing the application and the giving and publication of required notices.

I. NOTICE TO LANDOWNERS:
Upon the filing of an application with the District, the District shall give written notice to all owners of lands located within the District which are located within five miles of project site, setting forth the name of the applicant, a description of the project, a description or map of the land involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. In addition thereto, the District shall cause to be published pursuant to Government Code §§ 6060 and 6061.3 a notice that the application has been filed, setting forth the name of the applicant, a description of the project, a description or map of the land involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. the District shall retain one copy of the application documents, EIR, and any comments or reports thereon and make them available for public inspection and copying in accordance with the Public Records Act.

J. NOTICED PUBLIC HEARING:
No permit shall be issued without a noticed public hearing before the Board pursuant to Government Code §§ 6060 and 6061.3. The notice shall be given by the Secretary of the Board after completion and filing of the Engineer's Report and the environmental review process. The notice shall specify the time and place of the hearing, a general description of the proposed importation and that any interested person may submit evidence at the hearing. At least fifteen days must elapse between filing the documents with the Secretary of the Board and the date of the hearing.

K. PROCEDURES FOR CONDUCTING HEARING:
At the hearing, the Application, Report, Environmental Impact Report, additional submittals, comments from the public and the Engineer's Recommendation shall become evidence. The applicant and members of the public, or their representatives, may testify and introduce evidence in favor of, or in opposition to, the project.

L. DECISION AFTER HEARING.
At the conclusion of the hearing, the Board shall approve the application and grant the permit if the Board makes the findings set forth in Paragraph F., above, subject to the terms and provisions authorized in Paragraph M., below. If the Board is unable to make the findings set forth in Paragraph F., above, then the application shall be denied and no permit shall be issued. The Board shall direct that written findings are prepared in conformity with its decision and shall adopt said findings when prepared.

M. TERMS AND CONDITIONS OF PERMIT:
If an application is approved, the Board may impose such terms and conditions thereon as the Board deems necessary to prevent adverse effects on the aquifer(s), the quality and quantity of the groundwater supply, adjacent or neighboring lands, or the environment. Since direct or other subsurface injection of water into an aquifer entails an inherent risk of irreparable contamination due to the lack of natural filtering resulting from percolation, the permit shall prohibit the use of direct or other subsurface injection.

N. REVOCATION OF PERMIT:
Any violation of the terms and conditions of the permit will constitute grounds for revocation of the permit after a duly noticed public hearing thereon held in the manner described in the preceding Paragraphs.

O. INSPECTIONS:
If an application is approved and a permit granted, then the applicant's acceptance of the permit shall constitute the applicant's consent for the District Engineer, or his representatives, at any reasonable time, and from time to time, to enter the project site(s) and make such observations and measurements as are deemed necessary to assure that the project is being carried out under the terms of the permit.

P. DECISION OF BOARD FINAL:
The decision of the Board in any matter set forth herein, other than criminal penalties, shall be final upon its adoption of written findings.

Q. JUDICIAL REVIEW:
Any judicial action to set aside, annul, or vacate any decision or action taken by the Board pursuant to this Chapter shall be filed pursuant to California Code of Civil Procedure Section 1094.5 and within the time limits prescribed in California Code of Civil Procedure section 1094.6.

__.100.070 IMPORTATION OF FOREIGN WATER FOR GROUNDWATER BANKING.

A. REQUIREMENT OF PERMIT:
Except under a permit granted pursuant to this Section, no person may import Foreign Water for the purpose of Groundwater Banking within the boundaries of the District and located on or under lands subject to this Chapter. A permit is required under this Section whether or not such importation is pursuant to Groundwater Banking that is also subject to a separate permit under Section __.100.060. A permit for importation under this Section may cover all importation of water from a specified water source (designated by specific location and type) in amounts specified in the permit for a period not to exceed five years from the granting of the permit, after which a new permit shall be required.

B. APPLICATION FOR PERMIT:
Applications for permits under this Section shall be made to the District on forms provided by the District and shall contain all information and reports required therein. An Application shall be accompanied by a report ("Report") prepared at the applicant's expense by a qualified Registered Civil Engineer or Geologist, versed in geologic and hydraulic testing, which shows:

a. The source of the water to be imported.

b. The quantity and quality of water proposed to be imported.

c. The manner in which the water is to be conveyed to the Groundwater Banking facility, including the specific location of conveyance facilities, and copies of all permits and agreements showing consent for the use of such conveyance facilities.

d. The proposed method of placement of water to be imported and banked

e. The physical, and where applicable the geologic and hydrologic, properties of the conveyance facilities, including possibilities or likelihood of contamination or degradation problems.

f. The applicant's Project Water Measurement and Water Accountability Plan.

g. The applicant's Damage Prevention Plan.

h. The applicant's Project Monitoring Plan.

i. The applicant's Safety Action Plan.

j. The applicant's Emergency Action Plan.

k. The means and criteria for determining any effects on lands surrounding or neighboring all conveyance facilities and on their groundwater or surface water supplies.

l. The means and criteria for determining any effects on all other water supplies into which the proposed Foreign Water may be commingled while being conveyed, such as in a pool or reservoir.

m. Such other matters as the District may require.

Five copies of the Application, Report, and other information submitted shall be provided.

C. ENVIRONMENTAL IMPACT REPORT:

An Application for Foreign Water Importation Permit under this Section is deemed to be a "project" under the California Environmental Quality Act ("CEQA") and its implementing regulations ("CEQA Guidelines"). In order to ensure that decision-makers have sufficient information on the potential impacts of such a project, the preparation and certification of an Environmental Impact Report ("EIR") is hereby required for each such project application. The EIR must conform to CEQA, CEQA Guidelines, and all District requirements. The EIR shall be prepared, and shall be paid for by the applicant,

in accordance with the District's CEQA implementation procedures.

D. ADDITIONAL STUDIES AND REQUIREMENTS:
If, after receiving the Report as required by Paragraph B., above, and before or after receiving the EIR, the District Engineer desires more information, he or she may require preparation by applicant, at applicant's expense, of any additional geologic or hydrologic studies, or other studies or information, that he or she deems necessary to obtain information needed in order to make a recommendation on the application. The Engineer may review the application with potentially affected landowners and water users, with the staff of applicable state and federal agencies, and with the Madera County Water Oversight Committee.

E. REVIEW OF APPLICATION.
After reviewing the Application, Report, Environmental Impact Report, and any additional studies and other information required under Paragraph D., above, the District Engineer shall prepare a written report, with all comments attached thereto, in which he or she either shall recommend denial of the permit, or granting the permit with suggested conditions for the project. The written report also shall include recommendations concerning the adequacy of the EIR. All documents shall be filed with the Secretary of the Board.

F. FINDINGS REQUIRED FOR PERMIT APPROVAL OR DENIAL BY THE BOARD:
The permit may only be approved if the District finds that the proposed importation of Foreign Water will not have detrimental impacts on the District by determining that:

(1) The importation will not adversely affect the ability of other groundwater users to use, store, or transmit groundwater within any aquifer(s) underlying the District.

(2) The importation will not adversely affect the reasonable and beneficial uses of groundwater by other groundwater users within the District.

(3) The importation will not result in, expand, or exacerbate degradation of the quality or quantity of surface or groundwater within the District, or groundwater basins and aquifers within the District.

(4) The importation will not result in injury to a water replenishment, storage, restoration, or conveyance project or facility.

(5) The project will not adversely affect the surface or subsurface of neighboring or nearby lands, or the trees, vines, or crops growing or to be grown thereon.

(6) The importation will not adversely affect the overall economy or environment of the District.

(7) The existing qualities of the underground aquifers will not be degraded by the importation.

(8) The importation will not adversely affect the storage ability on adjacent lands where passive recharge may take place.

If the Board determine that one or more of the findings required by this Section cannot be made, the Board shall deny the permit application. The basis for any such denial shall be reflected in the Board's official record of proceedings.

G. RE-APPLICATION AFTER BOARD DENIAL:
Re-application for a permit that has been denied by the Board may not be filed until one year after the date of denial.

H. PAYMENT OF FEES.
The applicant at the time of filing shall pay such fees as are or may be established by the Board for processing the application and the giving and publication of required notices.

I. NOTICE TO LANDOWNERS:
Upon the filing of an application with the District, the District shall give written notice to all owners of lands located within the District which are located within five miles of any conveyance facilities that are within or adjacent to the District, setting forth the name of the applicant, a description of the project, a description or map of the land involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. In addition thereto, the District shall cause to be published pursuant to Government Code §§ 6060 and 6061.3 a notice that the application has been filed, setting forth the name of the applicant, a description of the project, a

description or map of the land involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. The District shall retain one copy of the application documents, EIR, and any comments or reports thereon and make them available for public inspection and copying in accordance with the Public Records Act.

J. NOTICED PUBLIC HEARING:
No permit shall be issued without a noticed public hearing before the Board pursuant to Government Code §§ 6060 and 6061.3. The notice shall be given by the Secretary of the Board after completion and filing of the Engineer's Report and the environmental review process. The notice shall specify the time and place of the hearing, a general description of the proposed importation and that any interested person may submit evidence at the hearing. At least fifteen days must elapse between filing the documents with the Secretary of the Board and the date of the hearing.

K. PROCEDURES FOR CONDUCTING HEARING:
At the hearing, the Application, Report, Environmental Impact Report, additional submittals, comments from the public and the Engineer's Recommendation shall become evidence. The applicant and members of the public, or their representatives, may testify and introduce evidence in favor of, or in opposition to, the project.

L. DECISION AFTER HEARING.
At the conclusion of the hearing, the Board shall approve the application and grant the permit if the Board makes the findings set forth in Paragraph F., above, subject to the terms and provisions authorized in Paragraph M., below. If the Board is unable to make the findings set forth in Paragraph F., above, then the application shall be denied and no permit shall be issued. The Board shall direct that written findings are prepared in conformity with its decision and shall adopt said findings when prepared.

M. TERMS AND CONDITIONS OF PERMIT:
If an application is approved, the Board may impose such terms and conditions thereon as the Board deems necessary to prevent adverse effects on the aquifer(s), the quality and quantity of the groundwater supply, adjacent or neighboring lands, or the environment.

N. REVOCATION OF PERMIT:
Any violation of the terms and conditions of the permit will constitute grounds for revocation of the permit after a duly noticed public hearing thereon held in the manner described in the preceding Paragraphs.

O. INSPECTIONS:
If an application is approved and a permit granted, then the applicant's acceptance of the permit shall constitute the applicant's consent for the District Engineer, or his representatives, at any reasonable time, and from time to time, to enter the project site(s) and make such observations and measurements as are deemed necessary to assure that the project is being carried out under the terms of the permit.

P. DECISION OF BOARD FINAL:
The decision of the Board in any matter set forth herein, other than criminal penalties, shall be final upon its adoption of written findings.

Q. JUDICIAL REVIEW:
Any judicial action to set aside, annul, or vacate any decision or action taken by the Board pursuant to this Chapter shall be filed pursuant to California Code of Civil Procedure Section 1094.5 and within the time limits prescribed in California Code of Civil Procedure section 1094.6.

.100.080 DISTRICT CONVEYANCE FACILITIES:

A. REQUIREMENT OF PERMIT:
In order to avoid injury to any legal user of water, and to avoid unreasonably affecting the overall economy or the environment of Madera county, no person may use any District-owned conveyance facility as a part of, or in connection with, Groundwater Banking for which a permit is required under this Chapter, or the importation of Foreign Water for which a permit is required under this Chapter, or the exportation of groundwater for which a permit is required under this Chapter, except under a permit granted pursuant to this Section. A permit is required under this Section whether or not such use is in connection with groundwater banking, importation of foreign water, or exportation of groundwater for which a separate permit or permits are required under other Sections of this Chapter. A permit for use of a district conveyance facility under this Section may cover all importation of water from a specified water source (designated by specific location and type) in amounts specified in the

permit for a period not to exceed two years from the granting of the permit, after which a new permit shall be required.

B. APPLICATION FOR PERMIT:
Applications for permits under this Section shall be made to the District on forms provided by the District and shall contain all information and reports required therein. An Application shall be accompanied by a report ("Report") prepared at the applicant's expense by a qualified Registered Civil Engineer or Geologist, versed in geologic and hydraulic testing, which shows:

a. The source of the water to be conveyed through the conveyance facility.

b. The quantity and quality of water proposed to be conveyed.

c. The manner in which the water is to be delivered to and withdrawn from the District conveyance facility and how the water is to conveyed from its source to the District's conveyance facility.

d. The physical, and where applicable the geologic and hydrologic, properties of the conveyance facilities through which the water will be delivered into the District's conveyance facilities, including possibilities or likelihood of contamination or degradation problems.

e. The applicant's Project Water Measurement and Water Accountability Plan.

f. The applicant's Damage Prevention Plan.

g. The applicant's Project Monitoring Plan.

h. The applicant's Safety Action Plan.

i. The applicant's Emergency Action Plan.

j. The means and criteria for determining any effects on lands within the District and otherwise surrounding or neighboring all conveyance facilities and on their groundwater or surface water supplies.

k. The means and criteria for determining any effects on all other water supplies with which the water proposed to be conveyed may be commingled while being conveyed.

l. The means and criteria for determining any effects of the use of the District conveyance facility on any other legal user of water conveyed or to be conveyed through such facilities.

m. The means and criteria for determining any effects of the use of the District conveyance facility on fish, wildlife, other instream beneficial uses, or the environment within the District and within Madera County.

n. The means and criteria for determining any effects of the use of the District conveyance facility on the economy within the District and within Madera County.

o. Such other matters as the District may require.

Five copies of the Application, Report, and other information submitted shall be provided.

C. ENVIRONMENTAL IMPACT REPORT:
An Application for Use of District Conveyance Facility under this Section is deemed to be a "project" under the California Environmental Quality Act ("CEQA") and its implementing regulations ("CEQA Guidelines"). In order to ensure that decision-makers have sufficient information on the potential impacts of such a project, the preparation and certification of an Environmental Impact Report ("EIR") is hereby required for each such project application. The EIR must conform to CEQA, CEQA Guidelines, and all District requirements. The EIR shall be prepared, and shall be paid for by the applicant, in accordance with the District's CEQA implementation procedures.

D. ADDITIONAL STUDIES AND REQUIREMENTS:
If, after receiving the Report as required by Paragraph B., above, and before or after receiving the EIR, the District

Engineer desires more information, he or she may require preparation by applicant, at applicant's expense, of any additional physical, geologic or hydrologic studies, or other studies or information, that he or she deems necessary to obtain information needed in order to make a recommendation on the application. The Engineer may review the application with potentially affected landowners and water users, with the staff of applicable state and federal agencies, and with the Madera County Water Oversight Committee.

E. REVIEW OF APPLICATION.

After reviewing the Application, Report, Environmental Impact Report, and any additional studies and other information required under Paragraph D., above, the District Engineer shall prepare a written report, with all comments attached thereto, in which he or she either shall recommend denial of the permit, or granting the permit with suggested conditions for the project. The written report also shall include recommendations concerning the adequacy of the EIR. All documents shall be filed with the Secretary of the Board.

F. FINDINGS REQUIRED FOR PERMIT APPROVAL OR DENIAL BY THE BOARD:

The permit may only be approved if the District finds that the proposed use of District conveyance facility will not:

(1) Injure any legal user of water.

(2) Unreasonably affect the delivery of water to any District landowners.

(3) Unreasonably affect fish, wildlife, or other instream beneficial uses.

(4) Unreasonably affect the overall economy of the county from which the water is to be transferred.

(5) Unreasonably affect the environment of the county from which the water is to be transferred.

If the Board determines that one or more of the findings required by this Section cannot be made, the Board shall deny the permit application. The basis for any such denial shall be reflected in the Board's official record of proceedings.

G. RE-APPLICATION AFTER BOARD DENIAL:
Re-application for a permit that has been denied by the Board may not be filed until one year after the date of denial.

H. PAYMENT OF FEES.
The applicant at the time of filing shall pay such fees as are or may be established by the Board for processing the application and the giving and publication of required notices.

I. NOTICE TO LANDOWNERS:
Upon the filing of an application with the District, the District shall give written notice to all owners of lands located within the District which are located within five miles of any conveyance facilities that are within or adjacent to the District, setting forth the name of the applicant, a description of the applicant's proposal, a description or map of the District facility involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. In addition thereto, the District shall cause to be published pursuant to Government Code §§ 6060 and 6061.3 a notice that the application has been filed, setting forth the name of the applicant, a description of the applicant's proposal, a description or map of the District facility involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. The District shall retain one copy of the application documents, EIR, and any comments or reports thereon and make them available for public inspection and copying in accordance with the Public Records Act.

J. NOTICED PUBLIC HEARING:
No permit shall be issued without a noticed public hearing before the Board pursuant to Government Code §§ 6060 and 6061.3. The notice shall be given by the Secretary of the Board after completion and filing of the Engineer's Report and the environmental review process. The notice shall specify the time and place of the hearing, a general description of the proposed importation and that any interested person may submit evidence at the hearing. At least fifteen days must elapse between filing the documents with the Secretary of the Board and the date of the hearing.

K. PROCEDURES FOR CONDUCTING HEARING:
At the hearing, the Application, Report, Environmental Impact Report, additional submittals, comments from the public and the Engineer's Recommendation shall become evidence. The applicant and members of the public, or their representatives, may testify and introduce evidence in favor of, or in opposition to, the project.

L. DECISION AFTER HEARING.
At the conclusion of the hearing, the Board shall approve the application and grant the permit if the Board makes the findings set forth in Paragraph F., above, subject to the terms and provisions authorized in Paragraph M., below. If the Board is unable to make the findings set forth in Paragraph F., above, then the application shall be denied and no permit shall be issued. The Board shall direct that written findings are prepared in conformity with its decision and shall adopt said findings when prepared.

M. TERMS AND CONDITIONS OF PERMIT:
If an application is approved, the Board may impose such terms and conditions thereon as the Board deems necessary to prevent adverse effects described in Paragraph F, above.

N. REVOCATION OF PERMIT:
Any violation of the terms and conditions of the permit will constitute grounds for revocation of the permit after a duly noticed public hearing thereon held in the manner described in the preceding Paragraphs.

O. INSPECTIONS:
If an application is approved and a permit granted, then the applicant's acceptance of the permit shall constitute the applicant's consent for the District Engineer, or his representatives, at any reasonable time, and from time to time, to enter the applicant's site(s) and make such observations and measurements as are deemed necessary to assure that the applicant's proposed use is being carried out under the terms of the permit.

P. DECISION OF BOARD FINAL:
The decision of the Board in any matter set forth herein, other than criminal penalties, shall be final upon its adoption of written findings.

Q. JUDICIAL REVIEW:
Any judicial action to set aside, annul, or vacate any decision or action taken by the Board pursuant to this Chapter shall be filed pursuant to Cal. Code of Civil Procedure Section 1094.5 and within the time limits prescribed in Cal. Code of Civil Procedure section 1094.6.

.100.090 PENALTIES FOR VIOLATION:

These rules and regulations are enacted to secure distribution of water in accordance with determined rights within the District pursuant to California Water Code Section 22085. Supervision and enforcement of these regulations shall be by District watermasters appointed under Water Code Section 22081. The District may elect to proceed with any or all of the following remedies for violation of this Chapter:

(a) A civil action against the violator for damages and/or injunctive relief.

(b) A misdemeanor criminal action against any violator who willfully and without authority closes, changes, or interferes with any headgate, waterbox, or measuring device while it is under the control of the watermaster, or who willfully takes, uses, or conveys water which has been denied him by the watermaster as not allowed under permit or in violation of the provisions of this Ordinance is guilty of a misdemeanor pursuant to Water Code Section 22088. Under Water Code Section 22089.5, a watermaster has the power to arrest any person violating any of the provisions of this article and to give him into the custody of the sheriff or other competent police officer within the county, and immediately thereafter make a complaint before a magistrate against the person so arrested. Every person who violates any of the provisions of this article is guilty of a misdemeanor and is punishable by a fine of not less than twenty-five dollars ($25), nor more than two hundred fifty dollars ($250), or by imprisonment in the county jail for not less than 10 days nor more than six months, or by both such fine and imprisonment pursuant to Water Code Section 22089.

(c) A referral to the Madera County District Attorney for prosecution of a misdemeanor criminal action against any violator without authority of the owner or managing agent, and with intent to defraud, take water from any canal, ditch, flume, or reservoir used for the purpose of holding or conveying is guilty of a misdemeanor under California Penal Code Section 592. If the total retail value of all the water taken is more than

four hundred dollars ($400), or if the defendant has previously been convicted of an offense under Penal Code Section 592 or any former section that would be an offense under Section 592, or of an offense under the laws of another state or of the United States that would have been an offense under this section if committed in this state, then the violation is punishable by imprisonment in the county jail for not more than one year, or in the state prison.

__.100.100 SEVERABILITY:

If any section, subsection, sentence, clause or phrase of this Chapter is for any reason held to be illegal, invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions hereof. The Board hereby declares it would have passed this Chapter and each section, subsection, sentence, clause or phrase hereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases are declared illegal, invalid or unconstitutional.

MADERA IRRIGATION DISTRICT
SPECIAL BOARD OF DIRECTORS MEETING
AUGUST 10, 1999

The Special Board of Directors Meeting of the Madera Irrigation District was called to order at 6:00 p.m. by President Pistoresi.

PRESENT: Directors Pistoresi, Bursey, Janzen, Galleano and Teranishi
ABSENT: None

Also Present:
S.H. Ottemoeller, General Manager
D.D. Roberts, Assistant General Manager-Chief Engineer
D. Green, Legal Counsel
C.A. Rascoe, Secretary to the Board

Seated in the audience was Rhonda Cargill, Michelle Lasgoity, Doug Sordi and Larry Howard.

1-0007 The Board moved into Closed Session at 6:05 p.m. for the purpose of discussing potential litigation with Special Counsel Mike Campos pursuant to Government Code 54956.9 and reconvened at 6:55 p.m.

President Pistoresi stated that there was no action taken in Closed Session.

President Pistoresi adjourned the Special Board Meeting and opened the Hearing for the Proposed Groundwater Management Plan.

1-0015 President Pistoresi opened the discussion stating that on October 1, 1997 the Madera Irrigation District Board of Directors passed a Resolution of Intent to prepare a Groundwater Management Plan following the first public hearing pursuant to California Water Code Section 10750 –10755. Now is the time and place of the second public hearing to determine whether or not to adopt a Proposed Ground Water Management Plan. This hearing was duly noticed as required by law and copies of the proposed plan are available for inspection or acquisition.

Any landowner in the District may file a written protest to the adoption of the plan any time prior to the conclusion of this hearing.

A majority protest will exist if landowners representing less than 50% of the assessed value of the land according to the District benefit assessment rules have filed written protest prior to the hearing. At this time no written protest has been file with the District. If a majority protest does not exist, the Board may adopt a plan at a conclusive hearing or subsequent Board Meeting within 35 days of this hearing.

1-0076 GM Ottemoeller started the presentation on the Groundwater Management Plan by going over a few of the background items. The plan is being done pursuant to the AB3030 that was passed in 1992 by the State Legislature. Partially in response to a large majority of the people who were trying to get the State to pass groundwater ordinances, this was done voluntarily by local agencies so they could demonstrate they were being responsible. CVPIA which also passed in 1992 and water conservation requirements by Bureau guidelines require that Districts go through a plan like AB3030. It's very important that the District have a strategic plan for its future decisions. The plan states a number of goals, all of them are consistent with the District's mission which is to obtain and manage affordable service and groundwater supplies to sustain agriculture long-term. Key goals are to assure long-term availability of groundwater, maximize surface water, prohibit the net export groundwater, protect the quality of the supply and prevent unnecessary restrictions on private well use. Due in part to urban growth, the depth to groundwater close to the City clearly is increasing at a higher rate than other parts of the District. The plan describes a number of efforts that the District can and will take, if necessary, to increase recharge areas within the District. The District would look to aquire land for groundwater recharge basins, continue the conveyance of surface water, increase or modify irrigation practices and efficiencies as necessary and encourage the use of flow meters on wells.

GM Ottemoeller addressed the issue of replenishment of ground water levels in storage. The District needs to pursue additional land for groundwater recharge, encourage farmers to use surface water instead of groundwater and also find some kind of economic incentives for a general encouragement to use the service water. Another stated part of the plan is to open relations with local and state agencies, like the City of Madera that will allow joint use of flood controlled basins as recharge basins during the irrigation season. Coordination with City and County on review of land use plans and other planning activities is also helpful.

In regard to groundwater banking and export, terms and conditions may be established by the District as part of a permit and there would be the ability to revoke permits if terms and conditions are violated. Inspection would be allowed as necessary to verify clients of the plan. Finally, the decision of the Board would be final and violations would be considered a misdemeanor.

1-0565 President Pistoresi opened the meeting to the public for comments or questions pertaining to the plan.

Doug Sordi questioned what the elements of the plan are to convey surface water to the canal. President Pistoresi addressed the questions stating that there is an upcoming meeting scheduled for Thursday, September 9th regarding flow control where this topic is to be addressed. GM Ottemoeller will investigate.

Michelle Lasgoity questioned how the District will ensure that the goals of the groundwater management plan are followed.

President Pistoresi stated the District currently has over 200 wells that it monitors. One of the District's goals is to implement a better plan in monitoring groundwater management. President Pistoresi emphasized that the District would look into the possibility of conducting a review once every six months or so in order to monitor this situation.

Larry Howard questioned how the discussions are progressing with the City and its commitments.

GM Ottemoeller responded that meetings have taken place with the City and are in the process of considering a storm drainage plan that includes additional storm basins. The City's plan looks as though it will take care of most of their future drainage and some of the existing storm drainage.

President Pistoresi thanked everyone involved for participating in the discussion and voicing their concerns in helping protect agriculture.

President Pistoresi closed the public hearing portion of the meeting at 7:35 p.m. and adjourned back into regular session.

MADERA IRRIGATION DISTRICT
RESOLUTION NO. 22-99

WHEREAS, the District has caused a Groundwater Management Plan to be prepared, and

WHEREAS, a noticed public hearing is required prior to the adoption of the Plan, and

WHEREAS, all notices required by law were duly made and given, announcing the time and place of the meeting to be on August 10, 1999, at the hour of 7:00 p.m. at the Board Room of the District, located at 12152 Road 28 ¼, Madera, CA 93637, and

WHEREAS, copies of the proposed plan were available at the office of the District for inspection or acquisition at the cost of reproduction, and

WHEREAS, said public meeting was duly held and evidence both oral and documentary having been introduced, and at the conclusion thereof, the hearing closed, and

WHEREAS, prior to the close of the hearing no written protests to the adoption of the plan were filed by any landowner within the District, and

WHEREAS, it is to the best interest of the District that the plan be adopted.

NOW, THEREFORE, BE IT RESOLVED:

1. The AB3030 Groundwater Management Plan, dated May 1999, prepared by Boyle Engineering Corporation is hereby adopted and shall be implemented by the Board of Directors of the District.

2. The Plan shall apply to all lands within the boundaries of the District except lands located within the City of Madera.

3. Lands located within the City of Madera shall not become subject to the Plan, unless and until the City Council by a majority vote declines to exercise the authority granted by Division 6, Part 2.75, and an agreement pursuant to Water Code §10750.8 is executed by the City and the District, or the City of Madera joins with the District in the adoption of the plan either directly or through a joint powers agreement.

The foregoing resolution was duly and regularly adopted at a regular adjourned meeting of the Board of Directors of the MADERA IRRIGATION DISTRICT, held at the offices of the District on the 10th day of August, 1999, on motion of Director Galleano, seconded by Director Janzen, on the following vote:

Directors voting aye: Pistoresi, Galleano, Bursey, Janzen and Teranishi

Directors voting no: None

Directors abstaining: None

Directors absent: None

Ronald H. Pistoresi, President

Attest:

Cynthia A. Rascoe, Secretary

MOTION **Director Galleano moved to approve Resolution No. 22-99, second by Director Janzen. Motion Carried by unanimous vote.**

Director Galleano read as a matter of record Resolution No. 22-99.

Director Galleano moved to adjourn the meeting at 7:40 p.m., seconded by Director Janzen. Motion carried.

APPROVED FOR THE BOARD:

Ronald H. Pistoresi
President

Cynthia A. Rascoe
Secretary of the Board

Date: Dec. 7, 1999

MADERA IRRIGATION DISTRICT
NOTICE OF PUBLIC HEARING ON AMENDMENT TO DISTRICT'S AB 3030 GROUNDWATER MANAGEMENT PLAN

NOTICE IS HEREBY GIVEN that on October 31, 2000 at 2:00 p.m. at the Board Room of the Board of Directors of the Madera Irrigation District located at 12152 Road 28 1/4, Madera, CA 93637, the District will hold a public hearing to determine whether or not to adopt an Amendment to the District AB 3030 Groundwater Management Plan as adopted August 10, 1999, pursuant to California Water Code Sections 10750 through 10755.

I. Summary of the Amendment

The primary goal of the Amendment is to delete the current Section 5 (Regulations Pertaining to Exportation of Groundwater) of the District's AB 3030 Groundwater Management Plan and replace it with a new Section 5 (District Groundwater Import, Export and Banking Ordinance).

II. Primary Goals of the Amendment

- Ensure the long-term availability of high-quality groundwater.
- Maintain local control of groundwater resources within the District.
- Minimize the cost of groundwater use.
- Prohibit the net export of groundwater from the District and use of groundwater to replace surface water removed from the District as result of a transfer.
- Minimize the impacts of groundwater pumping, including subsidence, overdraft, and soil productivity.
- Prevent unnecessary restrictions on the private use of the District's groundwater resources.
- Ensure coordination between the District, local, and regional groundwater management activities.
- Ensure efficient use of the District's groundwater resources and minimize deep percolation in areas where it may contribute to the shallow groundwater problem through the use of an effective water conservation and management program.
- Coordinate with other local irrigation districts and the city and county of Madera to preserve local water rights.
- Ensure that mitigation is provided for environmental and economic impacts within the District that could result from groundwater banking, groundwater exportation or importation of foreign water.

III. Items considered during preparation of the Amendment

The District evaluated the condition of the Madera Groundwater Basin and considered the following items when preparing the Amendment.

IV. District Proposals

The proposed Amendment includes the following elements:

- Rules and regulations pertaining to groundwater banking; importation of foreign water for the purpose of groundwater banking; exportation of groundwater outside the District; and use of District facilities for such purposes.

- The Amendment requires persons who use lands within the District for groundwater banking, importing foreign water for groundwater banking, and exporting groundwater outside of the District or use District facilities to obtain a permit for such use from the District, after presentation of the plan including geological and hydrological reports and public hearings.

V. Procedures for the Amendment Approval

Any landowner in the District may examine a copy of the Amendment at the office of the District and obtain a copy of the Amendment by paying the cost of reproduction.

Any landowner within the District may file a written protest to the adoption of the Amendment, or withdraw protest previously filed, at any time prior to the conclusion of the hearing.

A majority protest exists if landowners representing more than fifty percent of the assessed value of the land within the District file and do not withdraw protests to the adoption of the Amendment. In such event the Amendment will not be adopted.

If majority protest does not exist, the District may adopt the Amendment within thirty-five days after the conclusion of the hearing.

Dated: October 13, 2000

Cynthia Rascoe, Secretary to the Board

MADERA IRRIGATION DISTRICT

BOARD OF DIRECTORS MEETING
October 31, 2000

AGENDA ITEM NO. 4

SUBJECT: AB 3030 Groundwater Management Plan Hearing

DISCUSSION:

District Legal Counsel has drafted proposed revisions to the District's AB3030 Groundwater Management Plan that incorporate provisions for permitting importation, banking and exportation of water from the District. The proposed changes are consistent with the ordinance approved by Madera County in July.

RECOMMENDATION:

Approve the proposed revisions to the Groundwater Management Plan.

CFAS Low stated that a copy of a letter dated October 19 from Madera County Counsel that was written to the Attorney General requesting an opinion from the Attorney General on the Prop 13 one percent property tax allocation. The letter noted that the City of Madera has challenged the District receiving this money. It also stated that the Madera County Auditor, based on his review of the Revenue and Taxation Codes and the Water Code, feels the District qualifies for this money but the City is requesting the opinion of the Attorney General. A reply has yet to be received.

Director Galleano entered the meeting at 2:00 p.m.

President Pistoresi questioned if there is anything more that District staff needs to do in order to obtain a reply from the Attorney General. GM Ottemoeller stated that staff will look into this to see if more can be done.

Mr. Dick Johnson entered the meeting at 2:00 p.m.

GM Ottemoeller commended the staff for the job they did getting out such a large amount of assessments in a relatively short period of time. He added that there was a lot less time spent this year on getting the assessments out due to the speed of the new computer and printer. It was reduced down to three days from over seven.

1-0785 **AB 3030 GROUNDWATER MANAGEMENT PLAN HEARING**

GM Ottemoeller stated that this process is about the District approving a Groundwater Management Plan on August 10, 1999. One of the aspects of that Groundwater Management Plan was Chapter 5 which included a permitting requirement for groundwater exportation and groundwater banking. Since that time, the County of Madera has passed an ordinance that was similar in intent but added groundwater importation as one of the issues that would require a permit for County lands and requested that districts within the County amend whatever ordinance or rules they have to be essentially consistent with the County's ordinance.

The District had its legal counsel use the County's ordinance as a model and it's also very close to work that they were doing for the Gravelly Ford Water District in terms of developing an ordinance. This ordinance is basically a total rewrite from the District's original Chapter 5 of its Groundwater Management Plan.

GM Ottemoeller stated that what the District would be doing is amending the Groundwater Management Plan, so the current Chapter 5 would be taken out and this would be inserted as the new Chapter 5 of the

Groundwater Management Plan. Consistent with that, legal counsel has advised the District to pass an ordinance so it has the ability to enforce the rules set up by the Groundwater Management Plan. Essentially, they would be identical except one would be considered a Groundwater Management Plan and the other would be considered an ordinance.

The basic differences are simply that instead of the two aspects requiring a permit the District now has four separate ones. One of them is the exportation of groundwater from the District. The second one would be groundwater banking within the District. The third permitting requirement would be importation of groundwater. There is also a section that deals with the advance of water through the District system for the purpose of groundwater exportation/importation of banking. Another aspect of this that isn't in the District's current Groundwater Management Plan is provision from the State Water Code for penalties for violations. This was basically pulled out of the Water Code since the District doesn't have separate authority to impose fines.

GM Ottemoeller recommended that the proposed revisions not be approved of today but take any comments from the Hearing and then consider them for approval at the next meeting, the revision to the Groundwater Management Plan and the Ordinance.

Director Janzen stated that on Page 13, Terms and Conditions of Permit, where it states, "...the Board deems necessary to prevent adverse effects on the aquifer(s), the quality and quantity..." he would like to insert somewhere in that statement "the depth" whether it be too high or too low.

President Pistoresi asked if there was anyone in the audience who wanted to comment on AB 3030 Groundwater Management Plan.

There were no comments from the public.

1-1034 GM Ottemoeller commented regarding the requirements for the application on Page 15, Application for Permit, he would want to insert the method of the placement of the water to be banked. In otherwords, is it spreading ponds, injection wells, in-lieu banking. He also had a similar type comment on Page 23, on the importation. Basically the same thing, the proposed method of placement and disposition of the water that is going to be imported. He would like this added to the list of things that they have to provide in the application.

On Page 34, Findings Required for Permit Approval or Denial by the Board, GM Ottemoeller stated he would like to insert that "it would not unreasonably affect the delivery of water to District landowners."

Director Galleano stated if a groundwater banking project went in, they would only be entitled to current state law, which would be excess capacity. In otherwords, their growers would be serviced first at all times. GM Ottemoeller stated that would need to be made clear because the way it was written, it wasn't very clear to him.

As there were no further comments, President Pistoresi closed this portion of the Groundwater Management Plan Hearing stating that it would be continued for approval at the next MID Board Meeting on November 21, 2000.

GM Ottemoeller stated that under the rules of the Groundwater Management Plan if 50% of the landowners had protested, these changes couldn't have been made. Since there wasn't a protest, the Board now has 30 days to approve the changes to the Groundwater Management Plan. It won't be necessary to advertise again. Posting requirements have been met and no one requested copies of the proposed changes.

President Pistoresi pointed out that seated in the audience was Mr. Tom Petrucci, who is the MID incoming director for District 1. He will be replacing Director Teranishi who will be retiring from the District in December.

1-1231 **ENGINEERING REPORT**

CE Roberts stated since the last meeting the Engineering Department has been entering the Fall Groundwater measurement data into the computer. Over the past 15 years, average groundwater depth has dropped an average of 45 feet in the District. The crop survey input has also been entered into the computer and it will be printed out and sent to the Bureau. Work continues on the Underground Service Alert notices; splits have been completed for this year's assessments; City/County letters; finished the riparian program until more changes are needed; and data is being gathered for the paperwork on the annexation for Prudential for Legal Counsel Campos.

CE Roberts also reported on the Watershed Committee Meeting he attended in Oakhurst. At this time they are basically looking at water quality in various rivers and the ones they have started on are the Merced and Chowchilla Rivers. They are looking at things along the watershed that have potential for contamination into the rivers. As an example, there are some old gas stations along the Merced River and a lot of old mines in that area. The County has received some funding, so they will be doing some water quality testing on the Fresno River. They have about 25 sites

MADERA IRRIGATION DISTRICT

BOARD OF DIRECTORS METING
November 21, 2000

AGENDA ITEM NO. 7

SUBJECT: AB 3030 Groundwater Management Plan Amendment

DISCUSSION:

The Board held a hearing on October 31 regarding proposed amendments to the District's AB3030 Groundwater Management Plan. The amendments are related to permitting requirements for exportation of groundwater from the District, groundwater banking in the District or importation of surface water for purposes of banking in the District. The Board will consider for approval the proposed rules and regulations as presented at the hearing and as modified to reflect discussion or comments during the hearing.

District legal counsel has also recommended that the District adopt an ordinance consistent with the proposed amendments that will provide the District the necessary authority to enforce the Groundwater Management Plan.

RECOMMENDATION:

Approve the proposed amendment of the Districts Groundwater Management Plan and adopt an Ordinance Adding Rules and Regulations Relating to Groundwater Exportation, Groundwater Banking and Importation of Foreign Water.

raised on the amount of annexation and included if they detach or have a land use change, then the landowner is forced to detach at the landowner's cost. There is also a buy out provision in the agreement.

President Pistoresi stated there were some concerns about people who purchased the lands and excess lands, and where they are moving their water. CE Roberts stated the agreement has a provision that states the lands brought in as excess shall remain excess even if they change ownership to a person that could make it non-excess.

President Pistoresi stated that the main provision was access onto their lands and MID's ability to monitor the water. There was concern as to whether MID could drive on the land to check and see if the water has been taken onto land that is not being paid for. GM Ottemoeller stated that MID has that ability on land that is within the District. Land that is outside the District, there is the issue in which we need a warrant to check on the water use.

President Pistoresi stated he would like to see this issue clarified in the annexation agreement. The Directors were asked for their comments. Director Teranishi stated that this is a legitimate concern and if it is possible to incorporate language in the agreement to cover the District, it should be done. Director Janzen stated that the excess land would be part of all of the land and he believes MID would have the right to go on the land. Director Galleano stated that staff should clarify this issue with legal counsel.

President Pistoresi directed staff to inform the landowners that there is a provision to be incorporated in the annexation agreements that was left out from previous discussions. This item will be placed on the agenda for approval at the next board meeting.

Director Galleano left the meeting at 5:05 p.m.

2-3183 **AB 3030 GROUNDWATER MANAGEMENT PLAN AMENDMENT**

The Board held a hearing on October 31 regarding proposed amendments to the District's AB 3030 Groundwater Management Plan. The amendments are related to permitting requirements for exportation of groundwater from the District, groundwater banking in the District, or importation of surface water for purposes of banking in the District.

GM Ottemoeller stated the proposed rules and regulations have been modified based on his comments and any comments during the Hearing. GM Ottemoeller reported the changes he was proposing and stated that these changes were identified or discussed during the hearing.

MOTION **Director Janzen moved to approve the amendment of the District's Groundwater Management Plan and adopt an Ordinance Adding Rules and Regulations Relating to Groundwater Exportation, Groundwater Banking and Importation of Foreign Water, seconded by Director Bursey. Motion carried.**

3-310 **JANITORIAL BIDS**

CFAS Low reported that bids for janitorial services were opened and reviewed Monday, November 20, 2000 at 9:30 a.m. Proposals were sent out to 10 vendors and 3 were returned as "No bid". The bids received ranged from $500 per month up to $1,800 per month for service 3 days per week. Professional Building Maintenance is the District's current janitorial service. The Board reviewed the Janitorial Bid Summary Sheet.

CFAS Low recommended that the bid be awarded to Professional Building Maintenance and stated that they are holding the same rate as last year. A rating system will be incorporated to allow the District to monitor the cleaning services.

MOTION **Director Janzen moved to accept the low bid from Professional Building Maintenance in the amount of $960 per month as recommended by staff, seconded by Director Bursey. Motion carried.**

3-640 **UNDERGROUND SERVICE ALARM MODEM AND PRINTER**

CE Roberts reported that MID belongs to Underground Service Alert (USA) which provides the proposed location of projects near District facilities. The District receives the daily information through a dedicated modem that is programmed to receive only the USA messages. The current modem/printer is about seven years old and has shut down on several occasions recently because it is wearing out.

The new modem/printer with priority back-up service will cost $1,241.67 and is only available from a single source company.

MOTION **Director Janzen moved to approve the purchase of a new modem/printer unit with priority back-up service for $1,241.67 for the Underground Service Alert (USA) notification, seconded by Director Bursey. Motion carried.**

BEFORE
THE BOARD OF DIRECTORS
OF THE
MADERA IRRIGATION DISTRICT
STATE OF CALIFORNIA

ORDINANCE

GROUNDWATER EXPORTATION, GROUNDWATER BANKING, IMPORTATION OF FOREIGN WATER, AND USE OF DISTRICT FACILITIES FOR SUCH PURPOSES

Chapter .100
Rules and Regulations Pertaining to Groundwater Banking; Importation of Foreign Water For the Purpose of Groundwater Banking; Exportation of Groundwater Outside the District; and Use of District Facilities for such Purposes.

.100.010 PURPOSE AND INTENT.

A. The lands within Madera Irrigation District ("District") are heavily dependent upon groundwater. The groundwater basin(s) underlying the District and surrounding areas are severely overdrafted.

B. It is essential to the continued prosperity of the landowners and water users within the District that the quality and quantity of the groundwater supply be maintained to meet the demands of District landowners and water users.

C. Areas within the District are or could be or become subject to land subsidence due to the extraction of groundwater.

D. The direct or indirect transfer of groundwater outside the District may have significant environmental impacts on the area within the District including, but not limited to, increased groundwater overdraft; land subsidence; uncontrolled movement of contaminated groundwater; uncontrolled movement of poor quality or contaminated groundwater; the lowering of groundwater levels; increased groundwater or soil degradation; and loss of aquifer capacity due to land subsidence.

E. The direct or indirect transfer of groundwater outside the District may have significant economic impacts on areas within the District including, but not limited to, loss of arable

agricultural land; increased pumping costs due to lowered groundwater levels; increased groundwater quality treatment costs due to movement of contaminated or poor quality groundwater; replacement of wells due to declining groundwater levels, and replacement of damaged wells, conveyance facilities, roads, bridges and other structures due to land subsidence.

F. The importation of water originating outside of Madera County (whether or not conveyed through or pooled with facilities located in or adjacent to Madera County) for the purpose of Groundwater Banking such water ("Foreign Water") could, if unregulated, introduce water of an inferior quality into District aquifers, resulting in significant economic and environmental impacts on areas within the District, including, but not limited to, those specified in Paragraphs D. and E., above .

G. As used herein the term "Groundwater Banking" means the percolation, injection, or other recharge of a supply of water for the purpose of later extraction and delivery of such water outside of the District. Groundwater Banking can be reasonable and beneficial if it can be accomplished without:

(1) causing or increasing an overdraft of groundwater underlying the District;

(2) adversely affecting the ability of other groundwater users to use, store, or transmit groundwater within any aquifer(s) underlying the District (for example by utilizing storage that might otherwise be subject to natural or passive recharge and thus depriving other groundwater users of their use of the aquifer and the groundwater derived therefrom) ;

(3) adversely affecting the reasonable and beneficial uses of groundwater by other groundwater users within the District;

(4) resulting in, expanding, or exacerbating degradation of the quality or quantity of surface or groundwater within the District, or groundwater basins and aquifers within the District;

(5) resulting in injury to a water replenishment, storage, restoration, or conveyance project or facility;

(6) adversely affecting the surface or subsurface of neighboring or nearby lands, or the trees, vines, or crops growing or to be grown thereon;

(7) adversely affecting the economy or environment of the area within the District; or

(8) adversely affecting the recharge and storage ability on adjacent lands where passive recharge may take place.

H. For Groundwater Banking projects all or a portion of which will be located within the District, it is essential that the District be the agency that determines whether a permit should be issued to allow groundwater banking, exportation of groundwater, or importation of foreign water, within such areas. Without a permit process which allows public notice, public hearings, and compliance with environmental and other appropriate requirements, there would be no or inadequate local control over such groundwater banking, exportation of groundwater, or importation of foreign water, nor a method to insure that groundwater banking will meet the requirements of Paragraph G., above.

I. The District, as the agency most familiar with local conditions affecting groundwater, should adopt reasonable regulatory measures in relation to exportation of groundwater, Groundwater Banking, and the importation of Foreign Water for the purpose of Groundwater Banking.

J. California Water Code section 1810(d) provides that use of a water conveyance facility to transfer water may be denied if the use of the water conveyance facility will injure any legal user of water, will unreasonably affect fish, wildlife or other in-stream beneficial uses, or will unreasonably affect the overall economy or the environment of the county from which the water is being transferred.

.100.020 TITLE.

These provisions shall be known as "Rules and Regulations Pertaining to Groundwater Banking; Importation of Foreign Water For the Purpose of Groundwater Banking; Exportation of Groundwater Outside the District; and Use of District Facilities for such Purposes."

.100.030 DEFINITIONS

The terms used in this Chapter have the following meanings, unless otherwise expressly provided:

A. "Damage Prevention Plan" means a written plan which specifically details the problems that may occur as a result of the operation of the project and details what actions will be taken by the Applicant to mitigate or eliminate the problems in order to prevent damage to the site and surrounding properties.

B. "Emergency Action Plan" means a written plan which provides a complete and detailed evaluation of potential project failures that can occur during operation of the project and which details what actions the Applicant will take to prevent or minimize damage to the project and protect the public and surrounding properties.

C. "Exportation of Groundwater" means the extraction of groundwater from any well within the boundaries of the County and located on or under lands subject to this Chapter and used on lands which are outside of the boundaries of the County, unless the lands on which the water is being used are contiguous to the lands where the water is extracted, and are owned by the same landowner.

D. "Foreign Water" means water originating outside of Madera County, whether or not conveyed through or pooled with facilities located in or adjacent to Madera County, which is imported into Madera County for purposes of groundwater banking.

E "Groundwater" means water that occurs beneath the land surface and fills the pore spaces of the alluvium, soil, or rock formation in which it is situated.

F. "Groundwater Banking" means the importation of a surface supply of water that is percolated or injected to groundwater for storage, or placed underground by means of in-lieu recharge, for later extraction and delivery.

G. "Groundwater Management Plan" means a groundwater management plan adopted pursuant to California Water Code section 10750 et seq.

H. "Local water agencies" means public agencies, districts, or mutual water companies located wholly or partly within Madera County which have as their primary function the supplying of water for domestic, agricultural, industrial, or municipal purposes.

I. "Operations and Maintenance Plan" means a written plan which provides complete details of how the Applicant plans to operate and maintain the project after construction is completed. This Plan must show who will assume the responsibility for the operation and maintenance of the project and provide an organizational chart detailing the job responsibilities of each position shown.

J. "Person" means an individual, partnership, company, corporation, unincorporated association, public agency, or other form of business entity.

K. "Project Monitoring Plan" means a written plan which details how the Applicant will monitor the project site and properties outside of the project boundaries for possible damage from operation of the project.

L. "Project Water Measurement and Water Loss Accountability Plan" means a written plan which details how water into and out of the project will be measured and how the Applicant plans to calculate or otherwise account for project water losses. The Plan must provide details of what types of measuring equipment will be used on the project and where it will be installed.

M. "Safety Action Plan" means a written plan which provides information on who will be responsible for implementing the safety requirements for the project and which also provides details of all project safety requirements, including those needed to protect the public and surrounding properties.

.100.040 LAND SUBJECT TO ARTICLE.

This Chapter shall be applicable to all lands within the District boundaries. If a portion of a Groundwater Banking project lies within the District, and a portion lies outside the boundaries of the District, then this Chapter shall apply to that portion that lies within the boundaries of the District.

__.100.050 EXPORTATION OF GROUNDWATER BEYOND DISTRICT BOUNDARIES.

A. REQUIREMENT OF PERMIT:

Except under a permit granted pursuant to this Section, no groundwater extracted from any well within the boundaries of the District and located on or under lands subject to this Chapter, shall be used on lands which are outside of the boundaries of the District, unless the lands on which the water is being used are contiguous to the lands where the water is extracted, and are owned by the same landowner. A permit is required under this Section whether or not such exportation is pursuant to Groundwater Banking that is also subject to a separate permit under Section __.100.060. A permit for exportation under this Section may cover all exportation of water to a specified water user in amounts specified in the permit for a period not to exceed five years from the granting of the permit, after which a new permit shall be required.

B. APPLICATION FOR PERMIT:

Applications for permits under this Section shall be made to the District on forms provided by the District and shall contain all information and reports required therein. An Application shall be accompanied by a report ("Report") prepared at the applicant's expense by a qualified Registered Civil Engineer or Geologist, versed in geologic and hydraulic testing, which shows:

a. The source of the water to be exported.

b. The quantity and quality of water proposed to be exported.

c. The location to which and purpose for which the water is to be exported, including the reasonable and beneficial use to which the water is to be put.

d. The geologic and hydrologic properties of the aquifers from which extraction will be made, including possibilities or likelihood of subsidence problems.

e. Percolation tests to determine the ability of the aquifer(s) to recharge.

f. Clay layers and their effect on percolation.

g. The applicant's Project Water Measurement and Water Loss Accountability Plan.

h. The applicant's Damage Prevention Plan.

i. The applicant's Project Monitoring Plan.

j. The applicant's Safety Action Plan.

k. The applicant's Emergency Action Plan.

l. The location, size, spacing and depths of extraction wells.

m. Horizontal migration of groundwater from surrounding locations.

n. The means and criteria for determining any effects on surrounding lands and their groundwater supplies.

o. Such other matters as the District may require.

Five copies of the Application, Report, and other information submitted shall be provided.

C. ENVIRONMENTAL IMPACT REPORT:

An Application for extraction permit under this Section is deemed to be a "project" under the California Environmental Quality Act ("CEQA") and its implementing regulations ("CEQA Guidelines"). In order to ensure that decision-makers have sufficient information on the potential impacts of such a project, the preparation and certification of an Environmental Impact Report ("EIR") is hereby required for each such project application. The EIR must conform to CEQA, CEQA Guidelines, and all District requirements. The EIR shall be prepared, and shall be paid for by the applicant, in accordance with the District's CEQA implementation procedures.

D. ADDITIONAL STUDIES AND REQUIREMENTS:

If, after receiving the Report as required by Paragraph B., above, and before or after receiving the EIR, the District Engineer desires more information, he or she may require preparation by applicant, at applicant's expense, of any additional geologic or hydrologic studies, or other information

or studies, that he or she deems necessary to obtain information needed in order to make a recommendation on the application. The Engineer may review the application with potentially affected landowners and water users, with the staff of applicable local, state and federal agencies and with, and with the Madera County Water Oversight Committee.

E. REVIEW OF APPLICATION.
After reviewing the Application, Report, Environmental Impact Report, and any additional studies and other information required under Paragraph D., above, the District Engineer shall prepare a written report, with all comments attached thereto, in which he or she either shall recommend denial of the permit, or granting the permit with suggested conditions for the project. The written report also shall include recommendations concerning the adequacy of the EIR. All documents shall be filed with the Secretary of the Board.

F. FINDINGS REQUIRED FOR PERMIT APPROVAL OR DENIAL BY THE BOARD:
The permit may only be approved if the District finds that the proposed extraction and exportation will not have detrimental impacts on the District by determining that:

(1) The extraction and exportation will not cause or increase an overdraft on parts or all of the groundwater basins underlying the District.

(2) The extraction and exportation will not adversely affect the ability of other groundwater users to use, store, or transmit groundwater within any aquifer(s) underlying the District.

(3) The extraction and exportation will not adversely effect the reasonable and beneficial uses of groundwater by other groundwater users within the District.

(4) The extraction and exportation will not result in, expand, or exacerbate degradation of the quality or quantity of surface or groundwater within the District, or groundwater basins and aquifers within the District.

(5) The extraction and exportation will not result in injury to a water replenishment, storage, restoration, or conveyance project or facility;

(6) The extraction and exportation will not adversely affect the overall economy or environment of the area within the District.

If the Board determines that one or more of the findings required by this Section cannot be made, the Board shall deny the permit application. The basis for any such denial shall be reflected in the Board's official record of proceedings.

G. RE-APPLICATION AFTER BOARD DENIAL:
Re-application for a permit that has been denied by the Board may not be filed until one year after the date of denial.

H. PAYMENT OF FEES.
The applicant at the time of filing shall pay such fees as are or may be established by the Board for processing the application and the giving and publication of required notices.

I. NOTICE TO LANDOWNERS:
Upon the filing of an application with the District, the District shall give written notice to all owners of lands located within five miles of the exterior boundaries of the proposed extraction site, setting forth the name of the applicant, a description of the project, a description or map of the land involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. In addition thereto, the District shall cause to be published pursuant to Government Code §§ 6060 and 6061.3 a notice that the application has been filed, setting forth the name of the applicant, a description of the project, a description or map of the land involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. The District shall retain one copy of the application documents, EIR, and any comments or reports thereon and make them available for public inspection and copying in accordance with the Public Records Act.

J. NOTICED PUBLIC HEARING:
No permit shall be issued without a noticed public hearing before the Board pursuant to Government Code §§ 6060 and

6061.3. The notice shall be given by the Secretary of the Board after completion and filing of the Engineer's Report and the environmental review process. The notice shall specify the time and place of the hearing, the location from which the water is proposed to be extracted and exported, and a general description of the project and that any interested person may submit evidence at the hearing. At least fifteen days must elapse between filing the documents with the Secretary of the Board and the date of the hearing.

K. PROCEDURES FOR CONDUCTING HEARING:
At the hearing, the Application, Report, Environmental Impact Report, additional submittals, comments from the public and the Engineer's Recommendation shall become evidence. The applicant and members of the public, or their representatives, may testify and introduce evidence in favor of, or in opposition to, the project.

L. DECISION AFTER HEARING.
At the conclusion of the hearing, the Board shall approve the application and grant the permit if the Board makes the findings set forth in Paragraph F., above, subject to the terms and provisions authorized in Paragraph M., below. If the Board is unable to make the findings set forth in Paragraph F., above, then the application shall be denied and no permit shall be issued. The Board shall direct that written findings are prepared in conformity with its decision and shall adopt said findings when prepared.

M. TERMS AND CONDITIONS OF PERMIT:
If an application is approved, the Board may impose such terms and conditions thereon as the Board deems necessary to prevent adverse effects on the aquifer(s), the quality and quantity of the groundwater supply, adjacent or neighboring lands, or the environment.

N. REVOCATION OF PERMIT:
Any violation of the terms and conditions of the permit will constitute grounds for revocation of the permit after a duly noticed public hearing thereon held in the manner described in the preceding Paragraphs.

O. INSPECTIONS:
If an application is approved and a permit granted, then the applicant's acceptance of the permit shall constitute the applicant's consent for the District Engineer, or his

representatives, at any reasonable time, and from time to time, to enter the project site and make such observations and measurements as are deemed necessary to assure that the project is being carried out under the terms of the permit.

P. DECISION OF BOARD FINAL:
The decision of the Board in any matter set forth herein, other than criminal penalties, shall be final upon its adoption of written findings.

Q. JUDICIAL REVIEW:
Any judicial action to set aside, annul, or vacate any decision or action taken by the Board pursuant to this Chapter shall be filed pursuant to California Code of Civil Procedure Section 1094.5 and within the time limits prescribed in California Code of Civil Procedure section 1094.6.

__.100.060 GROUNDWATER BANKING.

A. REQUIREMENT OF PERMIT:
No person, who is subject to this Ordinance, other than the District, shall engage in Groundwater Banking on or under land subject to this Ordinance without first obtaining a permit from the District in accordance with this Section. A permit for Groundwater Banking under this Section may cover all Groundwater Banking for amounts of storage specified in the permit for a period not to exceed five years from the granting of the permit, after which a new permit shall be required. A permit for Groundwater Banking is not a permit for importation of Foreign Water to the Groundwater Bank (which importation shall require a separate permit under Section __.100.070), and it is not a permit for exportation of groundwater beyond District boundaries (which exportation shall require a separate permit under Section __.100.050).

B. APPLICATION FOR PERMIT:
Applications for permits under this Section shall be made to the District on forms provided by the District and shall contain all information and reports required therein. An Application shall be accompanied by a report ("Report") prepared at the applicant's expense by a qualified Registered Civil Engineer or Geologist, versed in geologic and hydraulic testing, which shows:

a. The location, plans, and specifications of the proposed project.

b. The quantity of water proposed to be imported, and the quality standards thereof, including possibilities or likelihood of contamination or degradation problems.

c. The method of placement of water to be banked

d. The quantities of groundwater to be extracted.

e. The geologic and hydrologic properties of the aquifers into which recharge will occur and from which extraction will be made, including possibilities or likelihood of subsidence problems.

f. Percolation tests to determine the ability of the aquifer(s) to recharge.

g. Clay layers and their effect on percolation.

h. Design of spreading areas.

i. The applicant's Operations and Maintenance Plan.

j. The applicant's Project Water Measurement and Water Loss Accountability Plan.

k. The applicant's Damage Prevention Plan.

l. The applicant's Project Monitoring Plan.

m. The applicant's Safety Action Plan.

n. The applicant's Emergency Action Plan.

o. The location, size, spacing and depths of extraction wells.

p. Horizontal migration of groundwater from surrounding locations.

q. The means and criteria for determining any effects on surrounding lands and their groundwater supplies.

r. Such other matters as the District may require.

Five copies of the Application, Report, and other information submitted shall be provided.

C. ENVIRONMENTAL IMPACT REPORT:
An Application for Groundwater Banking under this Section is deemed to be a "project" under the California Environmental Quality Act ("CEQA") and its implementing regulations ("CEQA Guidelines"). In order to ensure that decision-makers have sufficient information on the potential impacts of such a project, the preparation and certification of an Environmental Impact Report ("EIR") is hereby required for each such project application. The EIR must conform to CEQA, CEQA Guidelines, and all District requirements. The EIR shall be prepared, and shall be paid for by the applicant, in accordance with the District's CEQA implementation procedures.

D. ADDITIONAL STUDIES AND REQUIREMENTS:
If, after receiving the Report as required by Paragraph B., above, and before or after receiving the EIR, the District Engineer desires more information, he or she may require preparation by applicant, at applicant's expense, of any additional geologic or hydrologic studies, or other studies or information, that he or she deems necessary to obtain information needed in order to make a recommendation on the application. The Engineer may review the application with potentially affected landowners and water users, with the staff of applicable local, state and federal agencies, and with the Madera County Water Oversight Committee.

E. REVIEW OF APPLICATION.
After reviewing the Application, Report, Environmental Impact Report, and any additional studies and other information required under Paragraph D., above, the District Engineer shall prepare a written report, with all comments attached thereto, in which he or she either shall recommend denial of the permit, or granting the permit with suggested conditions for the project. The written report also shall include recommendations concerning the adequacy of the EIR. All documents shall be filed with the Secretary of the Board.

F. FINDINGS REQUIRED FOR PERMIT APPROVAL OR DENIAL BY THE BOARD:

The permit may only be approved if the District finds that the proposed Groundwater Banking project will not have detrimental impacts on the District by determining that:

(1) The project will not adversely affect the ability of other groundwater users to use, store, or transmit groundwater within any aquifer(s) underlying the District (for example by utilizing storage that might otherwise be subject to natural or passive recharge and thus depriving other groundwater users of their use of the aquifer and the groundwater derived therefrom).

(2) The project will not adversely affect the reasonable and beneficial uses of groundwater by other groundwater users within the District.

(3) The project will not result in, expand, or exacerbate degradation of the quality or quantity of surface or groundwater within the District, or groundwater basins and aquifers within the District.

(4) The project will not result in injury to a water replenishment, storage, restoration, or conveyance project or facility.

(5) The project will not adversely affect the surface or subsurface of neighboring or nearby lands, or the trees, vines, or crops growing or to be grown thereon.

(6) The project will not adversely affect the overall economy or environment of the District.

(7) The project will not cause or increase an overdraft of groundwater underlying the District.

(8) The project will not adversely affect the storage ability on adjacent lands where passive recharge may take place.

If the Board determines that one or more of the findings required by this Section cannot be made, the Board shall deny the permit application. The basis for any such denial shall be reflected in the Board's official record of proceedings.

G. RE-APPLICATION AFTER BOARD DENIAL:
Re-application for a permit that has been denied by the Board may not be filed until one year after the date of denial.

H. PAYMENT OF FEES.
The applicant at the time of filing shall pay such fees as are or may be established by the Board for processing the application and the giving and publication of required notices.

I. NOTICE TO LANDOWNERS:
Upon the filing of an application with the District, the District shall give written notice to all owners of lands located within the District which are located within five miles of project site, setting forth the name of the applicant, a description of the project, a description or map of the land involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. In addition thereto, the District shall cause to be published pursuant to Government Code §§ 6060 and 6061.3 a notice that the application has been filed, setting forth the name of the applicant, a description of the project, a description or map of the land involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. the District shall retain one copy of the application documents, EIR, and any comments or reports thereon and make them available for public inspection and copying in accordance with the Public Records Act.

J. NOTICED PUBLIC HEARING:
No permit shall be issued without a noticed public hearing before the Board pursuant to Government Code §§ 6060 and 6061.3. The notice shall be given by the Secretary of the Board after completion and filing of the Engineer's Report and the environmental review process. The notice shall specify the time and place of the hearing, a general description of the proposed importation and that any interested person may submit evidence at the hearing. At least fifteen days must elapse between filing the documents with the Secretary of the Board and the date of the hearing.

K. PROCEDURES FOR CONDUCTING HEARING:
At the hearing, the Application, Report, Environmental Impact Report, additional submittals, comments from the public and the Engineer's Recommendation shall become evidence. The applicant and members of the public, or their representatives, may testify and introduce evidence in favor of, or in opposition to, the project.

L. DECISION AFTER HEARING.
At the conclusion of the hearing, the Board shall approve the application and grant the permit if the Board makes the findings set forth in Paragraph F., above, subject to the terms and provisions authorized in Paragraph M., below. If the Board is unable to make the findings set forth in Paragraph F., above, then the application shall be denied and no permit shall be issued. The Board shall direct that written findings are prepared in conformity with its decision and shall adopt said findings when prepared.

M. TERMS AND CONDITIONS OF PERMIT:
If an application is approved, the Board may impose such terms and conditions thereon as the Board deems necessary to prevent adverse effects on the aquifer(s), the quality and quantity of the groundwater supply, adjacent or neighboring lands, or the environment. Since direct or other subsurface injection of water into an aquifer entails an inherent risk of irreparable contamination due to the lack of natural filtering resulting from percolation, the permit shall prohibit the use of direct or other subsurface injection.

N. REVOCATION OF PERMIT:
Any violation of the terms and conditions of the permit will constitute grounds for revocation of the permit after a duly noticed public hearing thereon held in the manner described in the preceding Paragraphs.

O. INSPECTIONS:
If an application is approved and a permit granted, then the applicant's acceptance of the permit shall constitute the applicant's consent for the District Engineer, or his representatives, at any reasonable time, and from time to time, to enter the project site(s) and make such observations and measurements as are deemed necessary to assure that the project is being carried out under the terms of the permit.

P. DECISION OF BOARD FINAL:
The decision of the Board in any matter set forth herein, other than criminal penalties, shall be final upon its adoption of written findings.

Q. JUDICIAL REVIEW:
Any judicial action to set aside, annul, or vacate any decision or action taken by the Board pursuant to this Chapter shall be filed pursuant to California Code of Civil Procedure Section 1094.5 and within the time limits prescribed in California Code of Civil Procedure section 1094.6.

__.100.070 IMPORTATION OF FOREIGN WATER FOR GROUNDWATER BANKING.

A. REQUIREMENT OF PERMIT:
Except under a permit granted pursuant to this Section, no person may import Foreign Water for the purpose of Groundwater Banking within the boundaries of the District and located on or under lands subject to this Chapter. A permit is required under this Section whether or not such importation is pursuant to Groundwater Banking that is also subject to a separate permit under Section __.100.060. A permit for importation under this Section may cover all importation of water from a specified water source (designated by specific location and type) in amounts specified in the permit for a period not to exceed five years from the granting of the permit, after which a new permit shall be required.

B. APPLICATION FOR PERMIT:
Applications for permits under this Section shall be made to the District on forms provided by the District and shall contain all information and reports required therein. An Application shall be accompanied by a report ("Report") prepared at the applicant's expense by a qualified Registered Civil Engineer or Geologist, versed in geologic and hydraulic testing, which shows:

a. The source of the water to be imported.

b. The quantity and quality of water proposed to be imported.

c. The manner in which the water is to be conveyed to the Groundwater Banking facility, including the specific location of conveyance facilities, and copies of all permits and agreements showing consent for the use of such conveyance facilities.

d. The proposed method of placement of water to be imported and banked

e. The physical, and where applicable the geologic and hydrologic, properties of the conveyance facilities, including possibilities or likelihood of contamination or degradation problems.

f. The applicant's Project Water Measurement and Water Accountability Plan.

g. The applicant's Damage Prevention Plan.

h. The applicant's Project Monitoring Plan.

i. The applicant's Safety Action Plan.

j. The applicant's Emergency Action Plan.

k. The means and criteria for determining any effects on lands surrounding or neighboring all conveyance facilities and on their groundwater or surface water supplies.

l. The means and criteria for determining any effects on all other water supplies into which the proposed Foreign Water may be commingled while being conveyed, such as in a pool or reservoir.

m. Such other matters as the District may require.

Five copies of the Application, Report, and other information submitted shall be provided.

C. ENVIRONMENTAL IMPACT REPORT:
An Application for Foreign Water Importation Permit under this Section is deemed to be a "project" under the California Environmental Quality Act ("CEQA") and its implementing regulations ("CEQA Guidelines"). In order to ensure that decision-makers have sufficient information on the potential impacts of such a project, the preparation and certification of an Environmental Impact Report ("EIR") is hereby required for each such project application. The EIR must conform to CEQA, CEQA Guidelines, and all District requirements. The EIR shall be prepared, and shall be paid for by the applicant, in accordance with the District's CEQA implementation procedures.

D. ADDITIONAL STUDIES AND REQUIREMENTS:
If, after receiving the Report as required by Paragraph B., above, and before or after receiving the EIR, the District Engineer desires more information, he or she may require preparation by applicant, at applicant's expense, of any additional geologic or hydrologic studies, or other studies or information, that he or she deems necessary to obtain information needed in order to make a recommendation on the application. The Engineer may review the application with potentially affected landowners and water users, with the staff of applicable state and federal agencies, and with the Madera County Water Oversight Committee.

E. REVIEW OF APPLICATION.
After reviewing the Application, Report, Environmental Impact Report, and any additional studies and other information required under Paragraph D., above, the District Engineer shall prepare a written report, with all comments attached thereto, in which he or she either shall recommend denial of the permit, or granting the permit with suggested conditions for the project. The written report also shall include recommendations concerning the adequacy of the EIR. All documents shall be filed with the Secretary of the Board.

F. FINDINGS REQUIRED FOR PERMIT APPROVAL OR DENIAL BY THE BOARD:
The permit may only be approved if the District finds that the proposed importation of Foreign Water will not have detrimental impacts on the District by determining that:

(1) The importation will not adversely affect the ability of other groundwater users to use, store, or transmit groundwater within any aquifer(s) underlying the District.

(2) The importation will not adversely affect the reasonable and beneficial uses of groundwater by other groundwater users within the District.

(3) The importation will not result in, expand, or exacerbate degradation of the quality or quantity of surface or groundwater within the District, or groundwater basins and aquifers within the District.

(4) The importation will not result in injury to a water replenishment, storage, restoration, or conveyance project or facility.

(5) The project will not adversely affect the surface or subsurface of neighboring or nearby lands, or the trees, vines, or crops growing or to be grown thereon.

(6) The importation will not adversely affect the overall economy or environment of the District.

(7) The existing qualities of the underground aquifers will not be degraded by the importation.

(8) The importation will not adversely affect the storage ability on adjacent lands where passive recharge may take place.

If the Board determine that one or more of the findings required by this Section cannot be made, the Board shall deny the permit application. The basis for any such denial shall be reflected in the Board's official record of proceedings.

G. RE-APPLICATION AFTER BOARD DENIAL:
Re-application for a permit that has been denied by the Board may not be filed until one year after the date of denial.

H. PAYMENT OF FEES.
The applicant at the time of filing shall pay such fees as are or may be established by the Board for processing the application and the giving and publication of required notices.

I. NOTICE TO LANDOWNERS:
Upon the filing of an application with the District, the District shall give written notice to all owners of lands located within the District which are located within five miles of any conveyance facilities that are within or adjacent to the District, setting forth the name of the applicant, a description of the project, a description or map of the land involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. In addition thereto, the District shall cause to be published pursuant to Government Code §§ 6060 and 6061.3 a notice that the application has been filed, setting forth the name of the applicant, a description of the project, a description or map of the land involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. The District shall retain one copy of the application documents, EIR, and any comments or reports thereon and make them available for public inspection and copying in accordance with the Public Records Act.

J. NOTICED PUBLIC HEARING:
No permit shall be issued without a noticed public hearing before the Board pursuant to Government Code §§ 6060 and 6061.3. The notice shall be given by the Secretary of the Board after completion and filing of the Engineer's Report and the environmental review process. The notice shall specify the time and place of the hearing, a general description of the proposed importation and that any interested person may submit evidence at the hearing. At least fifteen days must elapse between filing the documents with the Secretary of the Board and the date of the hearing.

K. PROCEDURES FOR CONDUCTING HEARING:
At the hearing, the Application, Report, Environmental Impact Report, additional submittals, comments from the public and the Engineer's Recommendation shall become evidence. The applicant and members of the public, or their representatives, may testify and introduce evidence in favor of, or in opposition to, the project.

L. DECISION AFTER HEARING.
At the conclusion of the hearing, the Board shall approve the application and grant the permit if the Board makes the findings set forth in Paragraph F., above, subject to the terms

and provisions authorized in Paragraph M., below. If the Board is unable to make the findings set forth in Paragraph F., above, then the application shall be denied and no permit shall be issued. The Board shall direct that written findings are prepared in conformity with its decision and shall adopt said findings when prepared.

M. TERMS AND CONDITIONS OF PERMIT:
If an application is approved, the Board may impose such terms and conditions thereon as the Board deems necessary to prevent adverse effects on the aquifer(s), the quality and quantity of the groundwater supply, adjacent or neighboring lands, or the environment.

N. REVOCATION OF PERMIT:
Any violation of the terms and conditions of the permit will constitute grounds for revocation of the permit after a duly noticed public hearing thereon held in the manner described in the preceding Paragraphs.

O. INSPECTIONS:
If an application is approved and a permit granted, then the applicant's acceptance of the permit shall constitute the applicant's consent for the District Engineer, or his representatives, at any reasonable time, and from time to time, to enter the project site(s) and make such observations and measurements as are deemed necessary to assure that the project is being carried out under the terms of the permit.

P. DECISION OF BOARD FINAL:
The decision of the Board in any matter set forth herein, other than criminal penalties, shall be final upon its adoption of written findings.

Q. JUDICIAL REVIEW:
Any judicial action to set aside, annul, or vacate any decision or action taken by the Board pursuant to this Chapter shall be filed pursuant to California Code of Civil Procedure Section 1094.5 and within the time limits prescribed in California Code of Civil Procedure section 1094.6.

.100.080 DISTRICT CONVEYANCE FACILITIES:

A. REQUIREMENT OF PERMIT:
In order to avoid injury to any legal user of water, and to avoid unreasonably affecting the overall economy or the environment of Madera county, no person may use any

District-owned conveyance facility as a part of, or in connection with, Groundwater Banking for which a permit is required under this Chapter, or the importation of Foreign Water for which a permit is required under this Chapter, or the exportation of groundwater for which a permit is required under this Chapter, except under a permit granted pursuant to this Section. A permit is required under this Section whether or not such use is in connection with groundwater banking, importation of foreign water, or exportation of groundwater for which a separate permit or permits are required under other Sections of this Chapter. A permit for use of a district conveyance facility under this Section may cover all importation of water from a specified water source (designated by specific location and type) in amounts specified in the permit for a period not to exceed two years from the granting of the permit, after which a new permit shall be required.

B. APPLICATION FOR PERMIT:

Applications for permits under this Section shall be made to the District on forms provided by the District and shall contain all information and reports required therein. An Application shall be accompanied by a report ("Report") prepared at the applicant's expense by a qualified Registered Civil Engineer or Geologist, versed in geologic and hydraulic testing, which shows:

a. The source of the water to be conveyed through the conveyance facility.

b. The quantity and quality of water proposed to be conveyed.

c. The manner in which the water is to be delivered to and withdrawn from the District conveyance facility and how the water is to conveyed from its source to the District's conveyance facility.

d. The physical, and where applicable the geologic and hydrologic, properties of the conveyance facilities through which the water will be delivered into the District's conveyance facilities, including possibilities or likelihood of contamination or degradation problems.

e. The applicant's Project Water Measurement and Water Accountability Plan.

f. The applicant's Damage Prevention Plan.

g. The applicant's Project Monitoring Plan.

h. The applicant's Safety Action Plan.

i. The applicant's Emergency Action Plan.

j. The means and criteria for determining any effects on lands within the District and otherwise surrounding or neighboring all conveyance facilities and on their groundwater or surface water supplies.

k. The means and criteria for determining any effects on all other water supplies with which the water proposed to be conveyed may be commingled while being conveyed.

l. The means and criteria for determining any effects of the use of the District conveyance facility on any other legal user of water conveyed or to be conveyed through such facilities.

m. The means and criteria for determining any effects of the use of the District conveyance facility on fish, wildlife, other instream beneficial uses, or the environment within the District and within Madera County.

n. The means and criteria for determining any effects of the use of the District conveyance facility on the economy within the District and within Madera County.

o. Such other matters as the District may require.

Five copies of the Application, Report, and other information submitted shall be provided.

C. ENVIRONMENTAL IMPACT REPORT:
An Application for Use of District Conveyance Facility under this Section is deemed to be a "project" under the California Environmental Quality Act ("CEQA") and its implementing regulations ("CEQA Guidelines"). In order to ensure that

decision-makers have sufficient information on the potential impacts of such a project, the preparation and certification of an Environmental Impact Report ("EIR") is hereby required for each such project application. The EIR must conform to CEQA, CEQA Guidelines, and all District requirements. The EIR shall be prepared, and shall be paid for by the applicant, in accordance with the District's CEQA implementation procedures.

D. ADDITIONAL STUDIES AND REQUIREMENTS:
If, after receiving the Report as required by Paragraph B., above, and before or after receiving the EIR, the District Engineer desires more information, he or she may require preparation by applicant, at applicant's expense, of any additional physical, geologic or hydrologic studies, or other studies or information, that he or she deems necessary to obtain information needed in order to make a recommendation on the application. The Engineer may review the application with potentially affected landowners and water users, with the staff of applicable state and federal agencies, and with the Madera County Water Oversight Committee.

E. REVIEW OF APPLICATION.
After reviewing the Application, Report, Environmental Impact Report, and any additional studies and other information required under Paragraph D., above, the District Engineer shall prepare a written report, with all comments attached thereto, in which he or she either shall recommend denial of the permit, or granting the permit with suggested conditions for the project. The written report also shall include recommendations concerning the adequacy of the EIR. All documents shall be filed with the Secretary of the Board.

F. FINDINGS REQUIRED FOR PERMIT APPROVAL OR DENIAL BY THE BOARD:
The permit may only be approved if the District finds that the proposed use of District conveyance facility will not:

(1) Injure any legal user of water.

(2) Unreasonably affect the delivery of water to any District landowners.

(3) Unreasonably affect fish, wildlife, or other instream beneficial uses.

(4) Unreasonably affect the overall economy of the county from which the water is to be transferred.

(5) Unreasonably affect the environment of the county from which the water is to be transferred.

If the Board determines that one or more of the findings required by this Section cannot be made, the Board shall deny the permit application. The basis for any such denial shall be reflected in the Board's official record of proceedings.

G. RE-APPLICATION AFTER BOARD DENIAL:
Re-application for a permit that has been denied by the Board may not be filed until one year after the date of denial.

H. PAYMENT OF FEES.
The applicant at the time of filing shall pay such fees as are or may be established by the Board for processing the application and the giving and publication of required notices.

I. NOTICE TO LANDOWNERS:
Upon the filing of an application with the District, the District shall give written notice to all owners of lands located within the District which are located within five miles of any conveyance facilities that are within or adjacent to the District, setting forth the name of the applicant, a description of the applicant's proposal, a description or map of the District facility involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. In addition thereto, the District shall cause to be published pursuant to Government Code §§ 6060 and 6061.3 a notice that the application has been filed, setting forth the name of the applicant, a description of the applicant's proposal, a description or map of the District facility involved, and a statement that all documents submitted in connection with the application are public records subject to inspection at the office of the District. The District shall retain one copy of the application documents, EIR, and any comments or reports thereon and make them available for public inspection and copying in accordance with the Public Records Act.

J. NOTICED PUBLIC HEARING:
No permit shall be issued without a noticed public hearing before the Board pursuant to Government Code §§ 6060 and

6061.3. The notice shall be given by the Secretary of the Board after completion and filing of the Engineer's Report and the environmental review process. The notice shall specify the time and place of the hearing, a general description of the proposed importation and that any interested person may submit evidence at the hearing. At least fifteen days must elapse between filing the documents with the Secretary of the Board and the date of the hearing.

K. PROCEDURES FOR CONDUCTING HEARING:
At the hearing, the Application, Report, Environmental Impact Report, additional submittals, comments from the public and the Engineer's Recommendation shall become evidence. The applicant and members of the public, or their representatives, may testify and introduce evidence in favor of, or in opposition to, the project.

L. DECISION AFTER HEARING.
At the conclusion of the hearing, the Board shall approve the application and grant the permit if the Board makes the findings set forth in Paragraph F., above, subject to the terms and provisions authorized in Paragraph M., below. If the Board is unable to make the findings set forth in Paragraph F., above, then the application shall be denied and no permit shall be issued. The Board shall direct that written findings are prepared in conformity with its decision and shall adopt said findings when prepared.

M. TERMS AND CONDITIONS OF PERMIT:
If an application is approved, the Board may impose such terms and conditions thereon as the Board deems necessary to prevent adverse effects described in Paragraph F, above.

N. REVOCATION OF PERMIT:
Any violation of the terms and conditions of the permit will constitute grounds for revocation of the permit after a duly noticed public hearing thereon held in the manner described in the preceding Paragraphs.

O. INSPECTIONS:
If an application is approved and a permit granted, then the applicant's acceptance of the permit shall constitute the applicant's consent for the District Engineer, or his representatives, at any reasonable time, and from time to time, to enter the applicant's site(s) and make such observations and measurements as are deemed necessary

to assure that the applicant's proposed use is being carried out under the terms of the permit.

P. DECISION OF BOARD FINAL:
The decision of the Board in any matter set forth herein, other than criminal penalties, shall be final upon its adoption of written findings.

Q. JUDICIAL REVIEW:
Any judicial action to set aside, annul, or vacate any decision or action taken by the Board pursuant to this Chapter shall be filed pursuant to Cal. Code of Civil Procedure Section 1094.5 and within the time limits prescribed in Cal. Code of Civil Procedure section 1094.6.

__.100.090 PENALTIES FOR VIOLATION:

These rules and regulations are enacted to secure distribution of water in accordance with determined rights within the District pursuant to California Water Code Section 22085. Supervision and enforcement of these regulations shall be by District watermasters appointed under Water Code Section 22081. The District may elect to proceed with any or all of the following remedies for violation of this Chapter:

(a) A civil action against the violator for damages and/or injunctive relief.

(b) A misdemeanor criminal action against any violator who willfully and without authority closes, changes, or interferes with any headgate, waterbox, or measuring device while it is under the control of the watermaster, or who willfully takes, uses, or conveys water which has been denied him by the watermaster as not allowed under permit or in violation of the provisions of this Ordinance is guilty of a misdemeanor pursuant to Water Code Section 22088. Under Water Code Section 22089.5, a watermaster has the power to arrest any person violating any of the provisions of this article and to give him into the custody of the sheriff or other competent police officer within the county, and immediately thereafter make a complaint before a magistrate against the person so arrested. Every person who violates any of the provisions of this article is guilty of a misdemeanor and is punishable by a fine of not less than twenty-five dollars ($25), nor more than two hundred fifty dollars ($250), or by imprisonment in the county jail for not less than 10 days nor more than six months, or by both such fine and imprisonment pursuant to Water Code Section 22089.

(c) A referral to the Madera County District Attorney for prosecution of a misdemeanor criminal action against any violator without authority of the owner or managing agent, and with intent to defraud, take water from any canal, ditch, flume, or reservoir used for the purpose of holding or conveying is guilty of a misdemeanor under California Penal Code Section 592. If the total retail value of all the water taken is more than four hundred dollars ($400), or if the defendant has previously been convicted of an offense under Penal Code Section 592 or any former section that would be an offense under Section 592, or of an offense under the laws of another state or of the United States that would have been an offense under this section if committed in this state, then the violation is punishable by imprisonment in the county jail for not more than one year, or in the state prison.

__.100.100 SEVERABILITY:

If any section, subsection, sentence, clause or phrase of this Chapter is for any reason held to be illegal, invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions hereof. The Board hereby declares it would have passed this Chapter and each section, subsection, sentence, clause or phrase hereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases are declared illegal, invalid or unconstitutional.